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BY

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TO CORRESPONDENTS

On account of the number of Pages which we hav devoted in this number to the interesting Siege of Bhurt poor, the "Extracts from Military Law", promised to our Readers, are necessarily deferred to the nex number.

We trust that "MILES" will see good cause for th non-appearance of his Paper.

The experiments on the "New Mortor Platform" ar not yet concluded by the Select Committee of Artiller Officers. The report will be given in our next.

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THE

BRITISH INDIAN



Military Repository.

No. V. JANUARY, 1824. Vol. 111.

ARTICLE I.

Journal of the Siege of Bhurtpoor.

January 2nd, 1805.

THE Army encamped about two miles from the southwest side of the town of Bhurtpoor, and consisted of:—

His Majesty's Dragoons -8th, 27th, and 29th Regiments, each of four weak squadrons, altogether not above 800 effective men.

H. C's Native Cavalry—1st, 2nd, 3rd, 4th, and 6th Regiments, each of three squadrons, but altogether not above 1,600 effective men.

European Infantry—The two flank companies of His Majesty's 22nd Regiment, H. M.'s 75th and 76th Regiments of Foot, and the H. C.'s European Regiment, in all about 1,000 effective men.

H. C.'s Native Infantry—1st Battalion 2nd Regiment, 1st Battalion 8th Regiment, 1st and 2nd Battalions 12th Regiment, 1st and 2nd Battalions 15th Regiment, six companies of 2nd Battalion 21st Regiment, and 2nd

Suge of Bhurtpoor.

Battalion 22nd Regiment: in all about 4,400 effective

Engineer Department—Three Officers of Engineers and three companies of Pioneers.

Artillery—Personal Equipment—one troop of Horse Artillery, with 1 Captain and 2 Subalterns.

Foot Artillery—One Lieutenant Colonel, 4 Captains, 7 Subalterns, and 184 Non-commissioned officers, rank and file; also 492 Native Gun Lascars and 137 Irregular Native Golundauze, with 174 Gun Lascars who had come over from the enemy during the previous campaigns.

N. B. This number included details for 45 of the following field pieces:

FIELD ORDNANCE.	5½ howrs.	4 ² / ₃ howrs.	12 pdrs.	6 pdrs.
Galloper Guns in line with the Cavalry, and served by them,			_ `	14
Guns in line with the Horse Artillery, and served by them,	2	_	-	4
try, and served by the Foot Artillery.		-	_	22
Field Artillery in Park or Battery, and served by the Foot Artillery,		2	7	8
Total Field Pieces	8	2	7	48
Grand total of Field Ordnance-65 Pi	eces.			

Siege Equipment—Six English 18-pounders, cast at Carron, four 8-inch and four 5½-inch brass Mortars.

Grand total of Siege Ordnance, six Battering Guns and eight Mortars.

The town of Bhurtpoor lies in North latitude 27° 13″ East longitude 77° 28″, in the province of Agra, 28 miles W. N. W. from that celebrated city which, since the reign of Acbar, has given the province its name. It was, as before stated, the capital and family residence of Rajah Runjeet Sing, and is of an irregular figure about

8 miles in circumference, every where enclosed by an earthen rampart of considerable height, disposed in short curtains, interspersed with solid circular towers or bastions, each connected to the curtain by a neck or passage formed by a continuation of the rampast. The town is protected on the side next the citadel by an embanked jeel, or large shallow piece of water, which supplies the ditch of the citadel at all times, and that of the town when required.

At the time the Army encamped before Bhurtpoor, no attention seemed to have been given towards repairing the injuries which time had gradually effected in its fortifications; much of the earth of the rampart had been washed down by the periodical rams of a long series of years, and the original glacis and ditch, in many parts, were merely marked by a gradual rise and depression of the soil. The bastions of the town, each contained 1, 2, or 3 cannons, supposed to be of native manufacture. The citadel of a square figure, was situated at the extremity of the town, one side overlooking the country, while the remaining three were encircled by the town wall.

The people, who on the 24th December had escaped from Deig, and the whole military force of the Bhurtpoor Chief, formed a numerous and efficient garrison, while the remains of Holkar's battalions dispersed on the 13th of November at the battle of Deig, as well as of those, defeated on the 25th of December at the reduction of that fortress, were collected outside. Eighty thousand men are stated to have been assembled on this occasion against the British Army; and although there may have been exaggeration in this statement, yet the number was certainly very great; while the town and citadel

had-been amply supplied with provisions, and military stores.

Against this place General Lake encamped with eight Regiments of Cavalry, and eleven Battalions of Infantry; several corps of which had suffered in the campaign of 1803—at the storm of Ally Ghur—the battle of Delhi—the attack of Agra—and the battle of Laswarree: others in 1804, had lost their main strength in the disastrous retreat of Colonel Monson, and in the battle and assault of Deig. If therefore the numbers of the British Army are taken at 2,400 Cavalry, and 5,400 Infantry, we exceed rather than under-estimate its effective strength.

With a force of only 2,400 Cavalry, it was utterly impracticable to invest a place, the works of which extended 8 miles in circumference, surrounded by trees, and enveloped in jungle. A regular investment, therefore, seems neither to have been intended or attempted; on the contrary, in all the subsequent operations of the siege, the town, in consequence of the inadequacy of the besieging force, was left in unrestrained communication with the country. The Rajah commanding resources of all kinds from the neighbouring territories, while the Infantry and Horse of Holkar and Ameer Khan, prevented the British troops from obtaining forage, except under the protection of strong escorts; and obstructed their communication with Agra, Muttra, and Deig, (their nearest military depôts), obliging them to detach much of their Infantry, and sometimes the whole of their Cavalry, for the protection of convoys to and from those places.

According to the established principles of attack, the besieging force ought to be at least five times the strength of the besieged garrison. But in this instance, 5,400

Infantry, had to carry on the duties of the trenches against a garrison, which, in point of numbers, was at least ten if not twenty times superior to themselves.

The extreme and disproportionate inferiority of the British, in Cavalry and Infantry, rendered an extraordinary force of Artillery highly necessary. But only six iron battering guns, and eight brass mortars of no considerable calibre, constituted their siege equipment, of which there was no further supply nearer than Allahabad, a depôt 300 miles distant, while even that was limited to fifteen or sixteen 18-pounders; and the reader will remark, that the withdrawing of the personal equipment from the field guns, was resorted to as the only means which the Artillery possessed of manning the batteries, erected during the siege.

While every branch of the Army was thus glaringly deficient in force, none was more so than the Engineer department. It consisted only of three Officers, to whom three companies of pioneers under as many Officers were attached.

January 2nd.

Orders of the day.—All Quarter Masters' establishments, under Quarter Master Serjeauts, to be sent to the Commanding Engineer at 8 o'clock to morrow morning.

Observations.*

Men totally ignorant of Engineer duties were here sent to be schooled in them, and the Engineers at the commencement of the siege, instead of having the as-

The Observations throughout the Journal are by the Compiler.

sistance of an expert, experienced, and efficient establishment of pioneers and sappers, had to undergo the tiresome task of endeavouring to teach the ignorant, duties which they had no inducement or interest to learn.

" Night between the 2nd and 3rd of January.

'A detachment of Infantry with two field pieces took possession of a deserted village in front of the centre of the Camp, about 14 mile distant from the town.

January 3rd.

The Officer at the head of the Engineer department, and the Officer commanding Artillery, in going down to the village, of which possession was last night taken, with a view to reconnoitre, were overtaken by General Lake, who asked the Commanding Engineer, "Will the battery be ready to-night?"

This Officer, knowing that no reconnoisance had been effected—no plan of attack arranged—no position for batteries fixed upon—no fascines or gabions prepared—nor any materials for making batteries, either cut or brought into camp, asked His Excellency, "How it was possible?" The General replied, "Then it shall be ready to-morrow night, and you must work harder, and get more men."

After this conversation the Officers before mentioned, proceeded to reconnoitre from the village above alluded to.

In front of the village the enemy in force occupied some level ground, covered with trees and jungle, which extending up to the town, obstructed all view of it; a small grove to the left, surrounded by a low mud wall, seemed a desirable point to make observations from; but it was filled with the enemy, who ventured out to skirmish, and fire their matchlocks. It was determined to take possession of this post.

Orders of the day.—All Quarter Masters' establishments, under Quarter Master Serjeants, to be sent to the Commanding Engineer to-morrow morning at 8 o'clock. No Officer, with the exception of those on duty, General Staff, Artillery, Engineer, and Pioneer Officers, are to be permitted to go beyond the line of piquets.

Observations.

Without obtaining the professional opinion of the Commanding Engineer, either as to the means or mode of attack, and without giving the Officers of that department time to examine the place, in order to form any preconcerted plan, a desire is expressed by the General to have a battery immediately erected.

The characteristic ardour of the General would seem on this occasion to have spurned at the maxim of Vauban, who declares that, "Precipitation serves not to accelerate the fall of a place, although it often retards its capture, and is always certain to render the contest more bloody," and advises "that no deviation be made from the established principles of attack under a pretext that a place is not strong enough to deserve a strict adherence to them, lest a weak place be induced to defend itself like a strong one."

The attempt to reconnoitre, made this day by the heads of the Artillery and Engineer departments, was frustrated, by the enemy not only being in possession of the grove, which was deemed the "desirable place to make observations from," but venturing out in front to skirmish.

Siege of Bhurtpoor.

The orders of the day again command the Quarter Masters' establishments to assist the Commanding Engineer, and forbid idlers to pass the limits of the Camp, lest they should annoy the Officers on duty, or be captured by the enemy, who, in a manner invested the British Camp, being, in a great degree, in possession of every inch of ground not within its piquets.

Night between the 3rd and 4th of January.

A detachment of European and Native Infantry, with two 6-pounder field pieces, took possession without opposition of the small grove mentioned in yesterday's Journal, and entrenched themselves there during the night: their trenches were about 1,100 yards from the town.

January 4th.

Preparations making in Camp for creeting a gun battery. All Gun Lascars off duty ordered to be sent to the park till further orders.

Observations.

Operations might have been expedited by a previous accumulation of materials; this preliminary object however was, from the paucity of force, unattainable, until the whole Army took up its position before the place; and then, instead of strong working parties from every branch of the Army, and every hand in Camp being energetically employed, only the Pioneers, the Gun Lascars of Artillery, and the Regimental Quarter Masters' establishments, seem to have been engaged in cutting and bringing in materials, or in forming gabi-

ons and fascines from them when brought to the Engineer depot. The Infantry and Cavaley might, perhaps with benefit to the service, have taken a share in this part of the operations of the siege.*

Night between the 4th and 5th of January.

Preparations in Camp continued.

January 5th.

On reconnoiting from a field in front of the trenches of the grove, a large round bastion, No. 1, with a curtain on each side of it, was all that could be discovered of the place. Every other part of the fortifications of the town was hid from view by a thick wood of high trees; no part of the works could be seen, except here and there, at distant intervals, the top of a high tower bastion.

The space between our trenches in the grove and the town, that is, the area formed by a line drawn from each of the outward extremities of the trenches up to those two curtains of the place which were discernible, was clear, being free from trees, except a small clump to the right of bastion, No. 1. (See Plates 17 and 18.)

"As the battery for breaching," says the Commandant of Artillery in his Journal, "was ordered to be begun upon immediately, and no time for reconnoitering was allowed; as we could not penetrate into the wood in

^{* &}quot;Trois ou quatre jours avant l'ouverture de la Tranchée," says Vauban, "ou commande des fascines et des picquets a tant par Batlion et tant par Escadron, ce que va 2 ou 3000 pour les premiers, et 12 ou 1500 pour les derniers." Every soldier ought to know how to make a fascine.—Compiler.

front, or to the right and left of the grove, this being occupied by the enemy's Horse and Foot; a spot was fixed upon for a battery, at a distance of about 500 yards in front of the entrenchment in the grove; but as this battery would be exposed to enfilade, unless the ground to the right and left was taken possession of by our troops, it was proposed to occupy a sand hillock, or dry pond, situated considerably to the rear and right of the site of the proposed battery, on the edge of the wood occupied by the enemy, while the mud walls of some deserted huts on the left were to form another post in rear of the battery."

A foraging party, consisting of a Battalion of Native Infantry, a Regiment of European Dragoons, a Regiment of Native Cavalry, and six guns of Horse Artillery, was this day ordered out to collect three days forage for the Army.*

For duty in the trenchos: 80 European Dragoons, as a working party, 200 European Infantry, and 12 companies of Native Infantry.

The Brigadiers of Cavalry were this day ordered to take the duty of General Officers for the day in camp, and the Brigadiers of Infantry to command in the trenches; the relief of the trenches was ordered always to parade at 5 o'clock in the evening. Brigadiers of the trenches coming on duty, to attend at 5 o'clock at head quarters for instructions.

^{*}The two Brigades of Cavalry generally went alternately for forage, and the single troop of Horse Artillery was always on these parties; there were only two Brigades of Cavalry in Camp, each of four Regiments, one having fourteen squadrons, the other thirteen. Compiler.

Observations.

Reconnoisance was this day for the first time pushed beyond the grove and trenches alluded to in the Journal of the 3rd instant; but nothing satisfactory seems to have been ascertained, and the enemy outside the fort, shewed themselves unintimidated by the reconnoitring escort.

Ignorant of the relative situation or profile of the works,—without any knowledge of the breadth or depth of the ditch, and only because the battery for breaching was ordered to be commenced upon immediately, AND NO FURTHER TIME FOR RECONNOITRING WAS ALLOWED, the Engineers fixed upon a point for a breaching battery, directly in front of the trenches in the grove occupied by our troops since the night between the 2nd and 3rd instant.

The enemy was in such force outside the fort, as to endanger the proposed battery; flank posts were therefore taken up to defend it, not from temporary sallies of the garrison, but from the enemy permanently entrenched outside the fort. The besieging force, in addition to the garrison within the walls, having thus to oppose an enemy outside.

Night between the 5th and 6th of January.

The two posts on the flank of the battery were occupied this evening. They were situated about 400 yards from each other, and about 700 yards from the town. Two 6-pounder field pieces were placed on the right, or Sand-hill post, and a breaching battery for six 18-pounders was commenced upon. But the Officer entrusted by the Commanding Engineer with marking out this battery, instead of establishing it on the line determined

upon, viz. parallel with, and a little in front of a large brick well, having a high parapet of masonry round its margin, which was to have been left on the right flank of the battery, fixed the piquets and commenced the battery, 120 yards in rear of the proposed spot, and brought it that distance further from the fort, in a line with the flank posts, and nearly in the centre of the interval between them, being about 700 yards from the curtain of the fort.

Observations.

The mistake of the Engineer upon this occasion, is said to have arisen from a particular tree, which was to have served as his guide to the proper site, having been cut down during the night. We are also informed that some lights which the enemy had planted along the edge of their ditch, led the Officer in question to form an opinion, that the spot originally fixed upon was nearer the fort than he imagined the proper site to be.

Having established two narrow trenches at 1,100 yards from the fort, the next operation of attack, was the erection of a breaching battery, at the distance of 700 yards, quite unconnected with the first trenches.

January 6th.

About 7 P. M. the enemy, perceiving the unfinished battery, began firing (for the first time) from his guns in bastion No. 1, and also from the adjacent bastions, No. 2 and 3.

Only one Officer and 27 Sepoys were this day left for the protection of the battery.

Morning Orders.—All Quarter Masters' establishments to be sent to the Commanding Engineer immediately. Relief for the trenches: 80 Dragoons, 200

European Infantry, and twelve companies of Nativa Infantry.

From the great want of Pioneer Officers, two Officers of Infantry who volunteered their services, were this day ordered to do duty with the Pioneers.

For duty in the batteries: two Officers of Artillery.

Observations.

If the enemy had this day shewn proper enterprize, they might have captured, destroyed, or greatly injured the unfinished battery, protected as it was only by one Officer and 27 Sepoys, unconnected with the posts on its flanks, or with the trenches in its rear.

Night between the 6th and 7th of January.

The battery was finished and armed during the night.

Observations.

After being five days before Bhurtpoor, the Engineer operations of the attacking party comprise merely the erection of a single battery for six 18-pounders, and the establishment of two insolated flank posts, without any trenches of communication between each other and the battery, or from any of those three points with the trenches of the grove in the rear. All intercourse with the battery and with the advanced flank posts, was therefore to be obtained, only by running over the plain exposed to the fire of the enemy.

January 7th.

Opened the battery to effect a breach in the curtain to our left of bastion No. 1. It was intended to have breached the curtain to our right of this bastion, but in finishing the battery, the embrazutes were so badly directed, that it was impossible to effect this, without pulling the battery to pieces, the whole work being entirely of gabions, and the platforms not laid in the proper direction; rather than remedy these errors, (which would have occasioned delay) the fire was directed on the curtain to our left of bastion No. 1.

The enemy were now discovered to have lodged themselves in that part of the wood which bordered on their ditch to the right and left of the line of fire from the battery. Here they were employed in throwing up works, and planted several guns in them. Their sentries occupied a line between our battery and the ditch, and they established a small post at the dry tank, between the sand hill and the town, about 450 yards in front of the battery.

A smart fire was kept up from the towers and curtains during the day. Relief for the trenches: 80 European Dragoons, (a working party), 200 European Infantry, and 12 companies of Native Infantry.

Observations.

The direction of the embrazures and platforms of a battery to their proper object, is one of the most essential points to be attended to by an Engineer; but yet is one in which error is very apt to be committed. In this, as in most other instances of the kind, there was no speedy or immediate remedy; the fire was therefore directed upon that spot on which the embrazures admitted the guns to bear, and their erroneous direction was allowed to determine the line of fire, and consequently to fix the point to be breached.

The enemy are now found acting with extraordinary boldness: they posted a line of sentries between the British batteries and their own ditch, we having no advanced place of arms from whence a fire might be kept up to check their audacity. A trench is opened by them opposite the left post of attack, which enables them to enfilade the plain over which the storming party may have to march, while in front they occupy the dry tank, as an advanced post for the same purpose, and are busy in improving the ditch in front of the breach.

No attempt is made by the besiegers, to counteract these operations on the part of the enemy.

Night between the 7th and 8th of January.

Trenches of communication from the flank posts to the battery were this night commenced upon, and a battery for four 8-inch, and four 53-inch brass mortars was erected to the right of the breaching battery.

Observations.

These trenches of communication, or places of arms, from the flank posts to the battery, ought to have been established before the battery was erected, or at the same time with it; they being necessary to hold the troops requisite to defend any attack made upon it.

A battery to contain eight mortars is established, but no serious effect was to be produced by a bombardment against so large a place, conducted on a scale so very limited in regard to the number, and calibre of the pieces employed.

In a more advanced position, and bearing directly on the breach, even the limited number of mortars we possessed might have eventually proved of some service, by

maintaining a plunging fire to prevent stockading in the course of the night; and if subsequently placed on the prolongation of the capitals of the bastions flanking the breach, they might, on the occasion of the assault, have commanded a fire upon the necks of those bastions, which, from their height and form, were completely covered and protected from the direct fire of the battering ordnance.

January 8th.

The mortar battery opened this morning both on the town and on the enemy's posts outside the ditch.

At daylight it was observed that the enemy during last night had stockaded the points attempted to be breached, and the battery was employed beating down this stockade, and re-opening the breach.

In the afternoon the breach was reported practicable.

Relief of the trenches: 200 Europeans, and 12 companies of Native Infantry. For duty on the gun battery: two Officers of Artillery, (one killed while on this duty.) In the mortar battery: one Officer of Artillery.

Observations.

The fire of our few mortars, instead of being concentrated so as to produce effect on any one object, was dispersed: some firing on the town, some at the enemy's outside posts.*

There being eight mortars in the battery, and, according to the return of Artillery, eight howitzers in the park, it appears extraordinary that the utmost advantage was not taken of all of them to throw shells during the night on the breach and bastions commanding it. The fire of the howitzers in addition to that of the mortars might, we think, have effectually prevented the enemy from stockading or repairing the breach.—Compiler.

At daybreak it was discovered that the enemy "had stockaded" the breach. This might have been expected. Although a part of the rampart in one of the curtains of the town had been brought down, this had been done prematurely; no advanced parallel or mortar battery had been established, from which a fire of musketry or shells could be kept up to prevent the enemy from repairing the breach during the night. Working almost undisturbed under protection of their outposts, they were in little danger of surprise; and in stockading the breach, executed a work of no great peril, with spirit and celerity.

"The breach was reported practicable." Considerable damage had no doubt been effected, and a narrow passage opened in the upper part of the rampart of one of the curtains; but was the road to this passage covered from the enemy's fire? were its defences injured? was the way leading to it examined? were the obstacles likely to be met with in assaulting it, such as were to be overcome by the means employed, if the enemy should prove resolute?

The road across the plain to the ditch was entirely exposed to the fire of the enemy, as well from the town as from the outposts, which flanked all approach. No attempt was made to cover this road from the enemy's fire, nor did the ground afford any natural protection to the troops during their march to the assault. The ditch had not been examined—nothing certain was known concerning it, or, in fact, concerning the breach itself, except that a portion of the works visible above the crest of the glacis was beaten down, and the opening made in the rampart seemed to the eye, looking through a telescope at a distance, to be capable of admitting the front of a sub-division. The defences remained uninjured.

, Night between the 8th and 9th of January.

It was intended to have stormed this night; but a rumour of water being in the ditch, determined General Lake to defer the assault till further information could be obtained. Batteries kept up a frequent fire of grape during the night, to prevent the breach from being again stockaded. The enemy returned it briskly both from the town and posts outside; their fire was directed on our batteries.

Observations.

The truth or falsity of the fact above referred to, was not ascertained; and the breach was finally assaulted without any information being obtained on this important point. The delay which took place, therefore, only afforded the enemy advantage, by giving them longer time to strengthen the defences of the breach, and thereby to increase the difficulties and dangers of the assault.

January 9th.

The breach at daylight was, notwithstanding last night's heavy fire of grape, again discovered to be stockaded, and well built up with mud and other materials. Battery employed all day in clearing it; upwards of 800 shot fired from the battery this day. The enemy kept firing from the bastions of the town, and from the citadel.

It was now determined to storm at dusk, in order to prevent the enemy having time to stockade the breach.

The storming party consisted of the flank companies of His Majesty's 22nú, 75th and 76th Regiments of Foot, of the Honourable Company's European Regiment, and of the 8th Native corps in camp: also two

Battalions of Native Infantry, viz. 1st Battalion 8th Regiment, and 2nd Battalion 12th Regiment, with four 6-pounders; the whole under Lieutenant Colonel Maitland, of His Majesty's 75th Regiment.

Two other attacking parties were also ordered, one on the right, another on the left. That on the right consisted of two companies of His Majesty's 75th Regiment, and the 1st Battalion 2nd Regiment Native Infantry, with a small party of Artillery; the whole under Major Hawkes;—that on the left, of 150 of the European Regiment, and the 2nd Battalion 22nd Regiment Native Infantry, under Lieutenant Colonel Kyan. The design of these parties was to repel any attack made from the enemy's trenches on the flanks of the assaulting or central column, and also to attack and seize the guns on the enemy's outworks, defended by their Infantry entrenched outside, to the right and left of the breach.

Orders of the day.—Relief of the trenches: same as yesterday. Two Officers of Artillery in the gun battery, and one in the mortar battery.

Observations.

The enemy had now obtained three days warning of the spot to be assaulted, and had not employed that time idly. The breach itself had been twice built up and stockaded. The defences on each side remained undestroyed by our shot, and the neck and round bodies of the collateral bastions commanded the breach in such a manner, that any troops, attempting to mount it, would be exposed to a destructive fire, both in rear and flanks, while the bravest of the enemy's force might be expected to defend its front.

If discovered, the storming party had to travel over 7 or 800 yards of ground, exposed from head to foot to the fire of the town, and when arrived at the ditch, to cross it in ignorance of its depth, under the deliberate aim of the enemy—exposed when they reached the breach to a fire in front, in rear, and on both flanks from musketry and cannon. Such must have been the necessary consequences of their advance being discovered; and no doubt this prospect had no encouraging effect. But to avoid these disadvantages, the darkness of night was chosen as favourable to a surprise.*

Night between the 9th and 10th of January.

The storming party, and the other two attacking columns, instead of moving to the assault at dusk as had been intended, did not reach their destination till half past eight o'clock P. M., the enemy being, by this delay, allowed several hours time to improve the difficulties of the breach.

The parties employed had general instructions to halt, and communicate, on a line supposed to be drawn just in rear of the breaching battery, and when it was understood that all was ready, they were to proceed to their respective destinations.

* Daylight is certainly the best time for storming works, when the troops can advance under cover to the Breach or Escalade; but when the enemy have an extensive front of fire, and the trenches have not been pushed very forward, to storm in daylight is seldom adviseable, as the troops would most frequently suffer so much in advancing, as to be disabled from any serious effort when arrived at the breach. The most preferable time for such open advance is at the moment of daybreak. In the dark the troops are liable to imaginary terrors, and being concealed from the view of their Officers, the brave only do their duty. Jones's Sieges in Spain, pages 306 and 307.

The storming party, or centre column, under Lieutenant Colonel Maitland, was ordered to march directly to the breach, taking with it four 6-pounders, which were in waiting on the left of the breaching battery.

The right attack was to march down to the enemy's outside post, to our right and front, near the Aine gate of the town, their route being to the right of the Sand-hill post; the left attack was to march down to the enemy's outside post on our left: both these attacks were accompanied by two 6-pounders, and were intended to drive the enemy from their outside posts, and, pursuing the fugitives, to endeavour to enter the gates of the place, the right column to enter the Aine gate, the left the Komeer gate.

The centre column of the storming party left camp about dark, and directed its march towards the battery. The enemy, from some cause or other, happened just at this time to open a heavy fire on the battery, and the column on approaching the battery, found itself directly within the line of this fire. This caused the troops composing the column to oblique to their right, and on approaching the trenches, the head of the column, instead of being near the battery, had obliqued near to the Sand-hill post.

Colonel Maitland, perhaps not thinking it worth while to make a flank movement from the Sand-hill post, for the purpose of gaining the battery, resolved to march across the plain, and gain the breach by inclining to his left. An officer was therefore dispatched to the battery to order its fire to cease, as the column was about to cross that line, and proceed to the breach. It ceased accordingly, and Colonel Maitland, preceded by a Sergeant and 12 men, placed himself at the head of the party and pushed onwards.

The irregularity of the ground, and some pools of water, among which, in crossing the plain, the party now got entangled, occasioned the column to open out; in consequence of which many lost their way—some following those for the left attack, others calling out, "Where is the breach?"—and the column fell into confusion. At last Major Salkeld, Quarter Master General, came up, and pointed out the true direction.

The troops composing this column, now moved in a tumultuous manner; with their flanks exposed to a heavy fire from the works of the town, across which they marched. They arrived opposite the breach in great disorder, and found a pool of water directly in front of it, communicating with, and forming part of the ditch. The enemy had here a tongue of land or dam, 12 or 15 feet broad, tapering off to 3 feet at its narrowest end towards the fort. This bank of earth had served the purposes of a bridge; but in order to fill all parts of the ditch near to the breach with water, a space of 15 feet in length had been cut through or broken down at the narrowest part of this dam, the broken part being about 4 feet below the level of the water, and forming the only passage across the ditch. The water in the ditch on each side of this broken dam was far beyond the depth of a man, and after crossing this, the breach could not be approached, except by a small berm at the foot of the rampart about 2 feet broad.

The storming party came suddenly upon this enlarged part of the ditch, and not expecting to find any water in it, many were appalled, considering the breach as cut off by an inufdation; several of the foremost of the storming party fell into the trench, and wetted their Ammunition, others got over it, scaling ladders were at

last laid across the cut, but by this time all was confusion.

The enemy received the storming party with a heavy fire of musketry and grape from three guns in the flank, or neck of the circular bastion No. 1, next to the breach.

Some men of the storming party, headed by their Officers, got across the ditch to the breach, and ascended within a few feet to the very top. One who got to the top had his boot pulled off by the enemy on the opposite side of the stockade. About 150 men went across the cut, a few of them halted about one-third up the breach, and others stood ranged on the small spot of ground at the bottom of the rampart, immediately to the left of it. Colonel Maitland, while gallantly exerting himself to get his men forward, received a mortal wound. The greater part of the troops either stopped or went back to the battery, as soon as they got to the water. The few bold fellows who reached the breach, seeing themselves unsupported, unable to retain their ground against an enemy now become doubly resolute, and finding it impracticable to reach the enemy's guns on the bastions to their right and left, descended, and at last followed the others to the trenches. 300 fascines were on this occasion entrusted to as many bildars to assist in filling up the ditch, the whole under a Serjeant of Artillery; but on the enemy firing, every bildar naturally fled, and when the fascines were wanted, not one was to be found.

The right column of attack marched towards the Aine gate—spiked three of the enemy's guns outside the town—drove them off their post on our right, and returned to support the centre.

The left column, by keeping too much to the left, came upon the inundation. This column however caused the

enemy to abandon his post upon our left, but finding the gateway of the town cut off by a ditch, they returned to the trenches.

The whole of the Cavalry and Horse Artillery were drawn out from dark till daylight, on the right of camp "en potence," with the front of the line, to defend it from any attack of Holkar's Cavalry, and to hold in check those troops of the enemy who might otherwise have assailed the storming parties and trenches.

Observations.

The march of the storming party commenced with an error in the route; disorder and confusion followed the movement over broken and bad ground. enemy obtained notice of its approach; the surprise intended failed, and the troops were exposed to a severe fire before they could get near to the breach. This, together with their previous confusion, rendered them no longer a body capable of united and orderly exertion. Every one acted for himself; unexpected obstacles appalled some, while night covered individual misconduct from view. The bravery of the few who reached the breach was opposed by an enemy, whose means of defence remaining uninjured, were exerted with great effect. Five Officers and 64 men were killed, and 23 Officers and 364 men wounded. The observation of Vauban, quoted in a preceding page, was on this occasion fully exemplified; "a weak place was 'enabled to defend itself like a strong one."

The causes of the defeat of the storming party are evident. They did not exist in the inherent strength or peculiar construction of the enemy's works. While cover remained for any considerable portion of musketry or

cannon on that part of the enemy's rarpart defending the point attacked, a surprise might be attempted; but if the enemy discovered the attack and resolutely defended the breach, little expectation of success ought to have been entertained. The enemy's defences were strong, because they remained undestroyed; the way to the breach was difficult, and the road dangerous, because it had not been improved by the means to be pursued in such cases; grape and musketry were showered upon the troops, because cover had been left for both to be fired in comparative safety.

The disasters attending this assault were the natural consequences of the extreme want of means, and consequent disregard of the principles of attack which unfortunately existed throughout the whole course of operations. Trusting entirely to the valour of the troops a system was adopted, the most desirable for the enemy, and the most fatal to the besiegers. What ought the enemy to have wished for, but that the British, possessing no overpowering force of Artillery and an extreme inferiority in numbers, should yet attempt every thing by direct force; seeking no advantage from that science which, experience has shewn, cannot with impunity be departed from in the attack of any fortified place resolutely defended?*

[&]quot;From the whole of Marshal Vauban's work it is evident" says Carnot, "that the true spirit of his method, his fundamental principle is, that the besieger must always, as much as possible, gain foot by foot those points which he wishes to occupy; from whence it follows that the object of the besieged must be to reduce his enemy to the necessity of taking every point by main force. This is a principle which the besieged must ever bear in mind, and which should direct all the operations of his defence." Montalembert's translation of Carnot's translate on the defence of fortified places, page 195.

The ordnance equipment of the siege was, it is true, on a disgracefully limited scale; but in proportion as the means were deficient, they ought to have been applied with every exercise of skill and judgment.

January 10th.

The following report of yesterday's failure was this day made by the Commander in Chief to government:—

To His Excellency the Most Noble Marquess Wellesley, Governor General, &c. &c.

"MY LORD,

"I have the honour to inform your Lordship that, in consequence of the breach in the wall of the town being reported practicable, I determined on storming the place yesterday evening. I chose this time in order to hinder the enemy from stockading the breach during the night, which had hitherto been the case.

"I am sorry to add that obstacles of an insurmountable nature were opposed to the storming party. On their arrival at the breach the ditch was found to be exceedingly deep: this difficulty however was soon surmounted, and the party gained the foot of the breach; but though every exertion was made, both by Officers and men, the breach was so imperfect that every effort to gain the top proved fruitless, and the column, after making several attempts, with heavy loss was obliged to retire, which they did in excellent order to our battery.

[&]quot;Certainty in a siege," says Colonel Jones, "depends upon an exact adherence to the rules of art; twhen they are departed from, all becomes chaos; time, life, and success are then put to the hazard." Sieges in Spain, page 268.

"Among the many brave men who have fallen on this occasion, it is with sincere grief I report the death of Lieutenant Colonel Maitland, of the 75th, Regiment, who commanded the storming party; his exertions are described by all to have been of a nature the most heroic, and his example animated the men to persevere in their attempts, which nothing but difficulties of the most unexpected nature could have rendered unsuccessful. This gallant Officer, though he received several severe wounds, continued to exert himself until he received a shot in the head, which proved instantaneously mortal.

"Although we unfortunately failed in gaining possession of the place, we were not wholly unsuccessful. A flanking column on the right, under the orders of Major Hawkes, gained possession of the enemy's battery, and succeeded in spiking and disabling their guns, and in destroying the greater part of the enemy who were opposed to them.

"I beg to assure your Lordship, that the conduct of our Officers and men employed last night, has been as exemplary as on every former occasion; but circumstances of an unexpected and unfortunate nature occurred, which their utmost efforts could not surmount; and I hope in a very few days their excellent conduct will be rewarded by the possession of the place."

"I have the honour, &c. &c.

(Signed) G. LAKE."

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"Among the number returned wounded there are not more than 20 serious cases; the remainder are so slight that the men will be fit for duty in a few days."

(Signed) J. GERARD, Adjutant General.

Names of Officers killed, wounded, and missing.

H. M.'s 75th Regiment-Lieutenant Col. Maitland.

H. M.'s 76th Regiment-Lieutenant Glabb.

Major of Brigade-Captain John Wallace.

2nd Batt. 12th Regt.—Ensign Waterhouse.

Artillery-Lieut. Perceval, killed in the battery during the day.

WOUNDED.

- H. M.'s 22nd Regiment—Lieutenants Sweetnam and Creswell.
- H. M.'s 75th Regiment—Major Campbell; Captains Hessman and Brutton; Lieutenants Byne, Tully, Maclachlan, and Mathewson.
- H. M.'s 76th Regiment—Captain Webner, and Lieutenant Cosgrove.
- H. C.'s European Regiment—Lieutenants Wood, Hamilton, and Browne.

1st Batt. 8th Regt. Lieuts. Latter, Kerr, & Turnbull.
2nd Batt. 12th Regiment—Major Gregory; Captains
O'Donnell and Fletcher; Lieutenants Sharpe and Barker.
2nd Batt. 22nd Regiment—Lieutenant Titcher.

MISSING.

H. M.'s 75th Regiment-Ensign Hatfield.

(Signed) J. GERARD, Adjutant General.

Note.—The numerous casualties among the Commissioned ranks is the strongest evidence of that gallant devotion to the service of their country, which was evinced by every individual Officer throughout all the operations of the Siege.

Continuation of the Journal. January 10th.

The enemy stockaded the breach during last night, and all this day it was covered with men from top to bottom; some carrying mud, and others water, to repair it. Our battery fired seldom, and the town slackly during the day. Accounts were received at Head Quarters, that the works had at one time been nearly deserted during last night's assault, but that finding the storming party did not come on, the enemy took courage and returned. A nephew of the Rajah is said to have been last night killed by our cannonade, and an uncle this day.

Orders of the day.—Relief of the trenches as usual-The whole of the Quater Masters' establishments of the different corps of the Army, are ordered to be sent to the Commanding Engineer to-morrow morning, at 7 o'clock. A troop of Native Cavalry, and two companies of Native Infantry are also ordered to be sent to that Officer, for the purpose of protecting the establishment in collecting materials.

No Officers of Artillery in the batteries.

Observations.

The enemy now in open day, and in the face of the batteries, repair the breach!

Night between the 10th and 11th of January. Nothing noted in the Journal.

Observations.

After having been ten days before the place, we are still without a proper parallel or place of arms. Although

on the night of the 9th we drove the enemy from his posts outside the town, we have taken no advantage of them, and they are re-occupied. We have not even improved our trenches of communication by widening them, nor lengthened them so as to enable us to confine the operations of the enemy outside the town: yet there are about 1,000 men in the trenches every night. On our side disaster seems to have slackened exertion, while success has redoubled the activity of the enemy.

January 11th.

Enemy busy repairing the breach as yesterday. Battery ceased firing this day; but the town, and the enemy's outposts continued to fire on the battery and trenches. Our people employed in bringing in materials, and making fascines for a new battery.

A foraging party, consisting of a Regiment of European Dragoons, a Regiment of Native Cavalry, the Horse Artillery, and a Battalion of Native Infantry, proceeded in quest of three days forage.

Orders of the day.—Relief of the trenches as before. The whole of the Quarter Masters' establishments ordered to the Commanding Engineer's tent by seven o'clock to-morrow morning. Quarter Master Serjeants to report to the Commanding Engineer the arrival of their establishments, and that Officer to report to Head Quarters such as may be late in coming, or deficient in number.

A troop of Native Cavalry and two companies of Native Infantry to be sent to the Commanding Engineer's tent to-morrow morning, from the "In line Piquets."

No officers of Artillery in the batteries.

Night between the 11th and 12th of January. Nothing noted in the Journal.

January 12th.

Batteries silent, except a shot fired now and then. The fire of the town and citadel slack. The enemy still busy in repairing the breach.

Orders of the day.—Relief of the trenches, same as usual. Quarter Masters' establishments, and the same guard as directed in yesterday's orders, to be sent to the Commanding Engineer to-morrow morning.

Observations.

No further reconnoisance by the heads of departments since the last storm.

Night between the 12th and 13th of January. Gun and mortar batteries repaired this night.

Observations.

Since the night of the 9th, the supply of materials has not enabled the besiegers to do more than repair their old works.

January 13th.

Batteries firing seldom. Fire from the town and citadel very slack. The enemy busy in the repairs of the breach.

A foraging party, consisting of a Regiment of European Dragoons, a Regiment of Native Cavalry, the Horse Artillery, and a Battalion of Native Infantry, proceeded in quest of these days forage.

A party of about 700 Horse came over from Holkar's army, and were taken into our pay.

Orders of the day.—Relief of the trepches, same as usual. Quarter Masters' establishments and the usual guard ordered to be sent to the Commanding Engineer to-morrow morning at 7 o'clock.

No Officers of Artillery in the batteries.

Observations.

Materials are still wanting to carry on new operations.

Night between the 13th and 14th of January.

A battery for three brass 12-pounder field pieces was crected this night, between the Sand-hill post and the mortar battery in the right trench of communication, to keep in check the fire from the circular bastion No. 3, and the works connected therewith.

Observations.

Brass field pieces are here brought into battery, not to silence the enemy's fire by destroying the parapet, an object which such ordnance, at a distance of 6 or 700 yards, could not soon if ever effect—not to dismount their guns, for the height and nature of the works, and the situation of the battery rendered ricochêt impracticable, and a direct fire inefficient; "but to keep their fire in check," an object which, with such means, it was impossible to secure, the utmost that could be done being to frighten the people on the works by an occasional shot, sometimes touching the top of the parapet and occasioning a momentary alarm.

January 14th.

[&]quot;Early this morning," says the Commandant of Artillery in his Journal, "an attempt was made to recon-

noitre the Ainelgate, from a small brick enclosure about 280 yards in advance of the Sand-hill post, but nothing could be seen, it being hid from view by trees. The enemy being in force in front, and the town firing upon us, we were discovered and retired."

Orders of the day.—Relief of the trenches, same as usual. Quarter Masters' establishments and the usual guard ordered to be at the Commanding Engineer's quarters to-morrow morning at 7 o'clock.

Observations.

A further, but feeble attempt at reconnoisance is here noticed, which proved unsuccessful, from the enemy outside being still in force in front, and the reconnoitring party withdrew, as soon as they had excited attention.

Night between the 14th and 15th of January.

Began a new breaching battery for four English 18-pounders, and two French 24-pounders (received from Deig), in a line continued from the mortar battery, and 200 yards further to the front; but on a survey of the ground it was found that the view of the curtain to our right of tower No. 1, (which it was now determined should be breached), would be interrupted by a clump of trees in our front.

The direction of the embrazures of the old breaching battery was this night altered, so as to allow the guns to bear on the above mentioned curtain as at first intended.

Observations.

Five days after the unsuccessful assault of the last breach, a new battery is frected, not to dismount or silence the enemy's guns, or to destroy his defences, but to make a second breach!! A breach seems to have been considered the primary, instead of the final object of the attack, and was therefore again to be effected, as before, without any arrangement being made for keeping it open. The quantity of battering ordnance employed, being totally insufficient to effect a practicable breach of proper extent, in one, or even in two days, some efficient measure should certainly have been adopted, to have prevented the constant stockading or repair at night of the damage occasioned during the day.

January 15th.

The 12-pounder field piece battery in the right trench of communication, answered, during the day, the fire from the town and fort.

Relief of the trenches, same as usual. An additional seer of gram ordered to be issued to the Cavalry horses.

Green forage is become exceedingly scarce, and dry forage not procurable within many miles of camp; the foraging excursions of a Brigade of Cavalry, a Battalion of Infantry, and the Horse Artillery, and the guns of foraging corps, now usually occupy a whole day from seven A. M. till dusk

For duty at the new battery this evening: two Officers of Artillery. For duty at the old battery: two Officers of Artillery.

Night between the 15th and 16th of January.

The new breaching battery was finished during this night, and the guns placed in it.

January, 16th.

The old breaching battery, containing six 18-pounders, (the embrazures of which were altered on the night of

the 11th)—the new battery, of two 24-pounders, and four 18-pounders, and the mortar battery of four 8-inch and four $5\frac{1}{2}$ -inch mortars, in all twelve guns and eight mortars, opened this morning at 7 A. M. on the curtain to our right of tower No. 1.

The battery of three 12-pounders, (brass field pieces) in the right trench of communication, fired, to destroy the defences of tower No. 3, and to check three guns mounted upon it; while the fire of the two 6-pounders, (brass field pieces), situated on the Sand-hill, was directed on the enemy's post situated to our left, outside the town. Town kept up a smart fire in return during the day. Battered down a considerable portion of the rampart of the curtain to our right of tower No. 1; but there appears to be nothing at bottom to give a foundation or base for the slope of a breach. All the earth from the breach seems to fall into the ditch, which the enemy appears to have deepened close under the rampart.

Relief of the trenches, same as yesterday.

Observations.

As it was intended to make a breach in the curtain situated between Nos. 1 and 3, tower bastions, its lower extremity ought to have been previously seen into, and measures have been taken for covering the troops in advancing to the assault, in descending and passing over the ditch, as well as for destroying the defences of the collateral bastions. But nothing of this kind was attempted; nor was there any parallel or battery advanced, from which a fire at night might have been maintained to prevent the enemy stockading the breach. Indeed such a measure could scarcely have been attempted, while the defences of the high towers and ramparts

which commanded the ground near the ditch remained untouched, and gave secure cover to the enemy's match-lock men. A tank and grove opposite to the breach, admirably situated to assist such an operation, remained in the occupation of the enemy.

An attempt was again this day made to destroy the enemy's defences, 700 yards distant, with brass 12-pounders.

Night between the 16th and 17th of January.

Two brass 12-pounders were sent down this night to the right or Sand-hill post, in lieu of the two 6-pounders which were withdrawn.

Batteries kept firing grape at the breach at irregular intervals during the night.

January 17th.

This morning, notwithstanding last night's fire from the batteries, the breach was found stockaded as usual. The batteries kept firing as yesterday; the town, the citadel, and the enemy's posts outside, answering.

Relief of the trenches, same as usual. For duty at the grand battery: one Officer of Artillery. For the mortar battery: one Officer of Artillery.

Observations.

The firing of grape or case shot from the breaching batteries at night, was intended to have prevented the breach from being stockaded; but this measure did not effect that purpose, which might have arisen as well from the relative situation and distance at which these batteries stood from their object, as from the long intervals between the rounds of ammunition fired.

Night between the 17th and 18th of January.

As constant a fire of shells was kept up on the breach during the hight, as it was practicable to maintain. The gun batteries firing at intervals.

Observations.

Although experience had repeatedly evinced, that the fire kept up from distant batteries during the night, was not of sufficient effect to prevent the enemy from stockading the breach, a quantity of valuable ammunition was again expended this night to little purpose. General Lake, in his letter of the 1st of July 1805, to the Governor General, remarks, "that this repeated stockading of the breach constituted the principal source of that resistance, which he found so formidable throughout the siege:" yet it is clear that nothing but a fire established near to, and commanding the breach, could have prevented a resolute enemy from effecting such a work.

January 18th.

Operations continued as yesterday. The breach again found stockaded. Batteries endeavouring to improve the breach and to destroy the stockade. Town, citadel, and enemy's posts returning our fire, fired 250 shells during this day and last night, and about 116 rounds from each gun in the battery.

The ditch at the bottom of the breach must be well deepened, as all the earth which has been daily brought down, seems quite insufficient to form a base for a slope up.

Three Battalions of Native Infantry, viz. 2nd Battalion 2nd Regiment, 2nd Battalion 9th Regiment, and the 1st Battalion 14th Regiment, in all about 1,200 men,

with six 6-pounder field, pieces, battalion guns, joined the Army this day under Major General Smith.

A foraging party, consisting of a Regiment of European Dragoons, a Regiment of Native Cavalry, the Horse Artillery, and a Battalion of Native Infantry, proceeded in quest of three days forage.

Relief of the trenches, same as usual.

Orders of the day.—In future no more than one dram is to be issued to each European in the trenches during the night, and two drams to men employed in working parties, except under particular orders from Head Quarters.

January 19th.

Found the breach stockaded as usual. Batteries, town, citadel, and enemy's posts, kept firing as heretofore.

Relief of the trenches, same as yesterday. For duty in the batteries: two Officers of Artillery.

January 20th.

Breach again stockaded, firing on both sides, same as yesterday. For duty in the grand battery: one Officer of Artillery. For the mortar battery: one Officer of Artillery.

The enemy has for some days past drawn back several of his guns, and refrained from firing those near the breach.

Under the apprehension that the wet ditch at the new breach was not fordable, three broad ladders or floating bridges had been prepared, covered with laths, constructed so as to be, raised or depressed at the bank of the dftch. But it was necessary to cut these ladders to the exact breadth of the ditch, and no knowledge of this had been obtained. Some zealous individuals had indeed made ingenious attempts to obtain information on the subject, but the chain of sentries which the enemy posted every night between our works and the ditch, frustrated their endeavours. It was suggested that a small party should be sent in the night to force its way through the enemy's sentries, and to examine the ditch, but this was superseded by the following stratagem:—

A havildar and two troopers of the 3rd Regiment of Native Cavalry, volunteered to be sent down to the right flank of our trenches, where they were to throw off their jackets, and gallop their horses direct to the breach, prctending to desert to the enemy, and to be in quest of an entrance into the fort. To strengthen the deception the troops, stationed at the post from which they set out, were ordered to fire upon them with blank cartridge. About 3 o'clock this was carried into effect. The troopers galloped off, and were immediately pursued by a party of Native Infantry. The enemy believing them to be deserters, beckoned them to keep to the right; this the troopers pretending not to understand, rode up to the ditch, and after obtaining a sight of it, turned their horses round, and gailoped back to the trenches unhurt by the fire now opened upon them from the fort; whence proceeding to Head Quarters they received their promised reward of 500 Rupees and immediate promotion.

According to their report the breach was easy to be ascended, and the ditch neither very broad, nor did it appear very deep; but some think they did not go sufficiently to the left to see the breach, or the ditch opposite to it.

The three ladders or floating bridges before mentioned were, however, reduced to 28 feet in length, according to the breadth of the ditch, as guessed at by the troopers.

Observations.

Four times have the enemy filled up and repaired this second breach, yet no attempt is made to establish a fire of sufficient effect to prevent them from constantly repairing in the night the damage produced during the day. Indeed we have before observed, that no near approach could have been established with safety, till the parapets of the high ramparts of the front attacked were battered down, because these, from the height of the ramparts, completely commanded the ground near the ditch.

After being 19 days and 18 nights before the fort of Bhurtpoor, the nearest trench of the besiegers, is still 700 yards from the enemy's works; and on the 20th of January, they are not a single foot nearer to the fort than they were on the 5th. They have not succeeded in destroying the defences of a single tower; they have not even attempted it. The bastions next the breach are still untouched, and the works which flank and defend it are in complete repair, while the enemy conceals his cannon from out batteries, reserving his fire for our storming party.

The expedient adopted with a view to obtain an accurate knowledge of the dimensions of the ditch, was clearly unfit to produce any satisfactory result. The most experienced European Officer, under circumstances the best calculated to ensure cool observation and accurate comparison with surrounding objects, judging only by his eye, can form but a very doubtful estimate of distance. The result of the few hasty glances obtained

by three Natives, during a momentary pause at the breach, attended by no small hazard and anxiety, ought therefore at once to have been discarded; and however politic it might have been under existing circumstances to applaud, or even to reward such an enterprize, nothing can, in our opinion, justify its having been permitted to influence and controul the most important determinations and serious operations of the siege.

Night between the 20th and 21st of January.

The whole of the 24-pounder shot being expended, the two 24-pounder guns were taken out of the battery, and their places supplied by two light 5½-inch howitzer field pieces.

A small battery for two 6-pounder field pieces was erected this night, about 200 yards to the left and front of the old breaching battery, in order to keep in check the guns brought out into the enemy's trenches to our left, outside the fort. A small battery for two 6-pounder field pieces was also made to the left of the breaching battery.

In consequence of the information brought by the troopers, it is determined that the breach shall be stormed to-morrow, after the batteries have broken down what the enemy may rebuild in the course of this night.

The storming party moved into the trenches at four A. M. a little before daylight.

The right column occupied the right trench, and the left column the left trench of communication.

The left column consisted of about 400 European Infantry, being the Flankers of his Majesty's 22nd and the Honourable Company's European Regiment, the whole of the 75th Regiment and two Battalions of

Native Infantry, viz. the 2nd of the 15th and 22nd Native Infantry, the whole under Colonel McCrae of his Majesty's 75th.

The right column consisted of two Battalions of Native Infantry, viz. the 1st battalion 14th and 2nd battalion 9th Regiment.

The portable bridges were to accompany this party, carried by picked Europeans, previously exercised to to their use.

While the storming party moved to the trenches, the Cavalry of the Army were kept in readiness to repulse any attack from the confederate Horse of Mear Khan and Holkar, allies of the Raja, who now in great force threatened our army, Meer Khan having joined with 10 or 15,000 men, by way of Dholpoor from Seronge and Malwa, a few days before.

Observations.

Our principal field magazine (Agra) is within 30 miles distance: yet at this important period of the siege, having expended all the best iron country-made 24-pound short, we have lost the further use of our largest calibre for want of sufficient supply.

The 24-pounders are replaced by two light 5½-inch howitzers to throw shells into the stockade, but the effect of that calibre against such an object could not but be very limited and uncertain, when at such a distance.

The fire from the enemy's outworks on our left has become so troublesome, as to occasion a battery for two field pieces being advanced to check it; and this was thrown forward as usual, quite unconnected with the other works.

Another battery of 6-pounders is also erected close to the left of the breaching battery.

January 21st.

The enemy in the course of last night felled several large trees, which had previously intercepted the view of Bastions No. 2 and 3, and by this means laid open the works covering the entrance of the Aine Gate, which was not before discernible.

The storming party instead of being accommodated in a wide and roomy parallel, was pent up all day in a crowded narrow trench. The first object which greeted their sight at daybreak was, the breach again stockaded, and their hopes and fears were kept alive the whole day, in observing the endeavours made by the batteries to effect, for the fifth time, an opening in the often-stockaded point of attack.

The batteries were employed from daybreak till a little before three P. M. in removing the stockade, and endeavouring to clear the breach which was at that time reported practicable.

The left column, commanded by Colonel McCrae, moved out at this hour from a cut made in the left trench of communication, and proceeded towards the breach. To In front of the storming party were four 6-pounder field pieces, to clear the breach, and to fire on the works flanking it. The Engineer on duty, the Pioncer officers, and Pioneers with scaling ladders, and 20 Europeans carrying the bridge ladders, made of bamboos, each 28 feet long, but only of sufficient breadth for two men to pass over abreast. The length of the ladders, as noticed in the journal of the 20th, having been proportioned to the breadth of the ditch, as guessed at by the troopers.

The column halted at the dry tank, about 500 yards in front of the battery, near which the four field pieces were drawn up and opened upon the ramparts to the left of the breach, while Colonel McCrae the Officer commanding, the Engineers, Pioneers, the ladders, and the bridges, accompanied by some Officers and part of the storming party, went on to the edge of the ditch, which was found full of water and dammed up as on the former occasion; they were soon followed by several other Officers and men.

The bridge was launched into the water, and Lieutenant Morris, of the grenadiers of the European Regiment, with some of his own men, swam across with the end of it; but it was found to be too short by about one-third, the computed breadth of the ditch being about 40 feet; and a tall grenadier who jumped into the water, shewed that it was more than 8 feet deep.

One of the scaling ladders was now thrown on the bridge in order to lengthen it, but in the hurry and awkwardness of the attempt, the ladder got entangled in the bridge, and instead of connecting it with the escarp, fell over on one side, and overset the bridge from which it could not be disengaged. No attempt, therefore, was made to pass the storming party over the ditch.

Lieutenant Morris, and several men who swam over with him, ascended the breach; the former got on the rampart, and there received a severe wound in his leg, and while swimming across the ditch to return when the attempt to storm was abandoned, he received another wound in the neck.

As the ditch was not passable, and Colonel McCrae found it impossible to convey such a number of men across as was requisite for the service; a retreat was

ordered and effected in the greatest confusion and hurry, the killed and wounded with some exceptions being left behind, as also the bridge and scaling ladders.

The right column, consisting of the 1st Battalion 14th. and 2nd Battalion 9th Native Infantry, under Lieutenant Colonel Simpson, had by this time moved round by the jungle in their advance to get in by the Aine gate, and emerged from the woods on the right of our works, just as the left column was retiring. This caused the left column to rally, and again to attempt the assault. In the mean time Colonel Simpson with the right column, marched up to the Aine gate, but finding an entrance impracticable, he joined the left column, and retreated in the most perfect order; the sepoys assisting to draw off the guns, one of which fired at intervals, covering the rear of the column, and preventing its being cut up by the enemy, some of whom had descended from the breach sword in hand, accompanied by parties of Horse from the Aine gate and outside posts on the right and left of the wood, threatening to attack it. The number of the enemy's guns bearing on the front and flank of the storming party during this attack, was calculated to be about 35.

When the enemy perceived that our troops had got back into the trenches, they came down the breach in multitudes, took possession of the bridge and scaling ladders, and carried them up in triumph. They also spread over the space between the battery and the breach, and in the face of the troops in the batteries and trenches, cut up all the wounded they could find, and stripped the bodies of the dead.

During the storm, the enemy sprung some mines: one on the edge of the ditch, another close to the clump of

trees near to the dry tank, where their outpost was; but both were sprung at too great a distance from our troops to occasion any loss.

During the whole of the time occupied in the advance, delay at the breach, and in the retreat, the enemy kept up a heavy fire of grape, round shot, and matchlocks, with considerable effect, as appears by our return of 18 Officers and 569 men, killed and wounded.

While the columns of Infantry were attempting to enter the breach, the Commander in Chief with the whole Cavalry, had moved out about two miles to the right flank of the Camp, in order to prevent the confederate force of the Rajah, Holkar, and Meer Khan, from interrupting the attack. The number of their Cavalry on this occasion was immense, the plain all round was covered with them. Some skirmishing and rocket firing on the part of the Mahrattas took place, and a party of their Horse stood steadily at 600 yards under the fire of our guns. Having prevented any attack of the camp and trenches, and killed about 50 men by cannonade, the Cavalry were withdrawn into camp by sunset, followed close up by the enemy, who were only kept off by the six Horse Artillery guns in rear of the column, maintaining a sharp retreating fire on the prolonge the whole way.

The following report was this day made to Governander in Chief:—

To His Excellency the Most Noble Marquess Wellesley, Governor General, &c. &c.

"My Lord,

"I have the honour to inform your Lordship that the breach appearing in a sufficient state of forwardness, I determined to attempt the place again this afternoon.

"The storming party, under the command of Lieutenant Colonel McCrae, moved out of the trenches, where they had lodged for the purpose, a little before 3 o'clock.

"I am sorry to add, that the ditch was found so broad and deep that every attempt to pass it proved unsuccessful, and the party was obliged to retrurn to the trenches without effecting their object.

"The troops behaved with their usual steadiness, but I fear, from the heavy fire they were unavoidably exposed to for a considerable time, that our loss has been severe.

"I shall have the honour to forward returns of the killed and wounded as soon as possible."

"I have the honour to be, &c. &c.

(Signed) G. LAKE."

in the Assault of Bhurtneer, on the 21st of January. 1805.

Return of Killed, Won	unded, and	Wounded, and Missing, in the Assault, of Bhurtpoor, on the 21st of January, 1803.	he i	1884	ult, o	f B	hur	8	, o	î,	212	5	, and	uary,	ž	او	1	
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Names of Officers killed, wounded, and missing. KILLED.

H. M.'s 76th Regiment-Lieutenants D. McCrae, and C. M. Bland.

2nd Batt. 15th Regt.—Lieutenant T. Macgregor.

WOUNDED.

II. M.'s 75th Regt.—Captain William Hessman; Lieutenants Thomas Grant, and J. C. Dumat.

H. M.'s 76th Regt.—Lieutenants C. Templeton, James McCrae, and W. Bright.

H. M.'s 22nd Regt.—Captain Lindsay.

2nd Batt. 9th Regt.-Lieutenant Trowers.

2nd Batt. 15th Regt.-Captain Lieut. H. Addison.

2nd Batt. 22nd Regt.—Lieutenants Watson, Day, and Pollock.

Pioneers-Lieutenant Galloway.

Observations.

If the state of the breach and dimensions of the ditch had even been such as the troopers on the 20th represented, the extent of the front attacked, and the complete state of the defences of the breach, ought under the circumstances of the resolution evinced by the enemy, and of the unadvanced condition of the trenches, to have prohibited an attempt at direct assault in open day.

The expectation of approaching unperceived, may be alleged as an excuse for the want of approaches on the first occasion; but the omission of them in the present instance, when the disastrous result, and confusion incidental to the previous attack, had caused it to be determined that this assault should be made in open day, appears inexcusable.

Instead of a column advancing gradually and without confusion to the breach, covered by the parapet of a

roomy trench of approach, and protected by the fire of batteries, or by riflemen with fixed rests, stationed in the cavaliers of an advanced parallel, clearing the breach of its defenders, by a fire of well-directed musketry, we find a column, whose numbers only added to its slaughter, and whose every step only brought it nearer to destruction, exposed from head to foot, during a long advance, delay, and retreat, to the deliberate fire of a protected enemy.

In lieu of mortars and cannon in advanced batteries, commanding a fire upon the whole extent of the breach and its defences, until the assaulting column approached its very summit, we find four 6-pounder field pieces, pushed forward in the open plain, with their details of Artillerymen, exposed as marks to the enemy.

In the situation in which our troops were placed, their conduct commands our respect. Without a chance, because without the means of success, we find them gallantly endeavouring to overcome insuperable obstacles. But perseverance in circumstances utterly hopeless, is folly. Prudence and humanity dictated a retreat; and if under such circumstances, disorder did prevail in part of one column, it is not without excuse, and was amply atoned for by the steady conduct of the other.

The enemy, protected from the fire of the assaulting column by untouched parapets, and from their bayonets by an impassable ditch, destroyed our troops "en masse," being left in all his strength; while our column, helpless and defenceless, was brought under his fire. In this unequal conflict the best feelings of the soldiery were materially injured, and the cruel murder of their wounded comrades, committed by a barbarous enemy in the madness of triumph and exultation of victory, was seen from the trenches in silence.

In reviewing the proceedings since the commencement of the siege, we can discover nothing but one continued series of unconnected and inefficient shifts, and inadequate expedients. Relying solely on the valour and bravery of the troops, without preparing the ground to enable them to derive any advantage from their discipline, the British General commenced the siege, and continued it; not only without attending to the established principles and means of attack, but in direct opposition to them. With powerful odds against him at first, his total deviation from scientific principle, rendered his chance of success more desperate; and hazarding the reputation of the British Army on the result, he sacrificed their credit and his own, in a conflict which he himself had rendered unequal.

January 22nd.

Batteries ceased firing; a few shot were thrown away by our field pieces and by the enemy during the day. The enemy busy building up the breach, which was considered by many of the storming party sufficiently practicable if they could have got to it.

Orders of the day.—Relief of the trenches, same as usual. For duty in the battery: one Officer of Artillery. His Excellency the Commander in Chief published the following order:—

"The Commander in Chief returns his best thanks to the Officers, Soldiers, and Natives, for the gallantry and steadiness they displayed in the attack of yesterday, which although ultimately unsuccessful, reflects the highest credit on the courage and intrepidity of the troops employed, and demands, in His Excellency's opinion, this public testimony of his approbation. "The Commander in Chief cannot sufficiently lament the number of brave men who have suffered on this service, where the utmost exertions of their intrepid valour were unequal to surmount the unexpected obstacles which were opposed to them.

"The Commander in Chief trusts that in a very few days these obstacles, which have hitherto rendered all attempts fruitless, will be completely surmounted, and that the good conduct and bravery of the Soldiers of this Army will be rewarded by the possession of the place, and by the opportunity of proving to the enemy and to the country, that although hitherto, from unforeseen difficulties, success has not crowned their attempts, that their spirit is undaunted, and that their gallantry will ultimately triumph.

"His Excellency feels infinitely indebted to Lieutenant Colonel McCrae for the judgment and ability with which he arranged and conducted the attack.

"Extra batta is to be served out to the Europeans today, and two hundred Rupees is to be given to each Native Corps of Cavalry, Infantry, Gun Lascars, and. Pioneers."

This day the 1st Regiment of Native Cavalry, and 1st Battalion 15th Regiment of Native Infantry, were despatched under the command of Captain Welsh of the former corps, for the protection of a convoy of provisions on its way from Deig to camp.

Observations.

We are at a loss to know on what grounds the troops were by the orders of this day, flattered with the hope, that "in a very few days" the obstacles and unforeseen difficulties which had hitherto rendered their exertions fruitless, would be entirely surmounted. There seems throughout the order, a manifest anxiety to raise the feelings of the Army, but reliance is still evidently placed upon their further personal exertions rather than upon any accession of means, or change in the plan of operations. The last paragraph of the order will suggest to the reader observations, which we refrain to enlarge upon.

January 23rd.

Firing on both sides, same as yesterday. The enemy has completed the repairs of the last breach.

Relief of the trenches: 200 Europeans and 700 Native Infantry. The Quarter Masters' establishments, a troop of Cavalry, and two companies of Infantry ordered to be sent to the Commanding Engineer to-morrow morning.

For duty in the battery: one Officer of Artillery.

"Thoughts were now entertained," says the Commandant of Artillery, "of attacking the Aine gate to our left of No. 3, tower bastion."

"Went down to the enclosure of masonry in front of the Sand-hill post in order to reconnoitre. The Quarter Master General's head hurkariah pointed out the position of the gate, but we could not view the gate itself, it was completely hid by trees growing within the walls.

"Agreed to erect a new breaching battery at a spot about 200 yards of the N. E. angle of the brick enclosure: also a hattery for two 12-pounders (field pieces), to the right, in front of the Sand-hill post, for the purpose of checking the fire of tower bastion, No. 4, as soom as the new breaching battery should open."

The convoy under Captain Welsh, which marched from camp yesterday, joined the Deig and Muttra convoy last night, which consisted of 12,000 bullock loads of grain; it was encamped last night about 22 miles from camp, and moved towards the Army early this morning. Holkar, having received intelligence of its approach, and of the nature of the force employed for its security, had detached Meer Khan against it, with his whole Army of horse and foot, and four guns. With this force, amounting to 8,000 men, Meer Khan lay in wait near to Combhere, (Komeer), and at break of day fell in with the detachment about six miles from camp. The Cavalry of the detachment being only 400 strong, could not protect 12,000 bellocks when marching; and under these circumstances, the detachment took post in a large village of lofty site, where, beset on all sides, they defended their charge, beating off the assailants repeatedly till two of their guns were totally disabled. The enemy's horse and foot then making a desperate push, possessed themselves of half the village. Such was the state of things at half past 8 this morning; and although the firing had been heard early, it was not till near 8 o'clock that Licuteuant Colone Need, with half of the 2nd brigade of Cavalry, was hurried by the Commander in Chief out of camp, and hastened in that direction. General Lake, with Colonels Wood, Vandeleur, and Brown, and the rest of the Cavalry and Horse Artillery, following immediately to support.

The sepoys of the detachment perceiving the clouds of dust that marked the advance of Lieutenant Colonel Need's column, raised loud shouts of exultation at the approach, (as they fancied), of General Lake, and under this impression were so animated as to sally forth upon

the enemy's guns, which they carried at the point of the bayonet, just as the Cavalry arrived, who, dashing in, covered the ground with killed and wounded before the rest of the troops with the Commander in Chief came up. Six hundred of the enemy were slain, the rest fled, leaving behind near forty stands of colours with four guns and their tumbrils.

During the contest a great number of bullocks laden with grain, from the want of conductors went astray, and many falling in the way of the enemy's horse, were goaded by their lances, some to Bhurtpoor, and others towards Komeer: out of 12,000, only 1,800 bullocks arrived in camp.

The principal loss of the British in this affair, amounted to eight sepoys killed, and two Officers and 36 men wounded.

To His Excellency the Most Noble Marquess Wellesley, Governor General, &c. &c.

"MY LORD,

"I have the honour to inform your Lordship that I yesterday morning detached the 1st Regiment of Native Cavalry, and 1st Battalion 15th Regiment, under the command of Captain Welsh, of the former corps, to meet a convoy of provisions on its way from Muttra to my camp.

"The detachment having yesterday evening joined the convoy, halted for the night about six coss from my camp, and moved again at an early hour this morning.

"The detachment was attacked on its march by a very considerable body of Infantry with guns, and the whole of the united force of Cavalry belonging to Holkar, Meer Khan, and Bappoojee Scindeah, about four

coss from camp, which obliged them to occupy a village for the purpose of collecting the convoy and preserving it from the numerous Cavalry of the enemy.

"Immediately on hearing the firing I ordered Lieutenant Colonel Need, with His Majesty's 27th Light Dragoons, and the second Regiment of Native Cavalry, to proceed to the relief of the party, whilst I followed with the main body of the Army.

"I have the pleasure to inform your Lordship that the detachment under Captain Welsh made a most gallant defence, and immediately on the approach of Lieutenant Colonel Need, they moved out of the village, charged, and totally routed the enemy to whom they were opposed.

"Great numbers of the enemy were killed, and near 40 stands of colours, and all the Artillery they had in the field, consisting of 4 guns, with their tumbrils, fell into our hands.

"This body of Infantry was commanded by Meer Khan, who, (according to the information I have received from some of his servants who were made prisoners), was so close pressed that, to prevent himself from being known, he stripped himself of his clothes and arms, and is supposed to have escaped in that situation; some accounts render it probable that he has fallen; but on this subject I have no certain information.

"Meer Khan's palankeen with a complete set of armour, said to be his, has been brought into camp, as has also Bappoojee Scindeah's palankeen.

"Too much praise cannot be bestowed on the troops engaged, for their good conduct and activity on this occasion; and I feel infinitely indebted to Captain Welsh, who commanded the escort, for the gallantry with which he resisted the repeated attacks of a numerous enemy.

"Lieutenant Colonel Need is likewise entitled to my best thanks for the activity and spirit with which he charged and completed the route of the enemy, whose loss has been very great.

"I feel it particularly incumbent on me to mention the service rendered by Major Salkeld, Deputy Quarter Master General, who carried my orders to Lieutenant Colonel Need, and proceeded to point out the road to that Officer; his services on this as on every occasion have been conspicuous for zeal and gallantry. I want words to express to your Lordship how infinitely I feel indebted to this meritorious Officer for the assistance he has rendered me, in every instance where I have had an opportunity of availing myself of his services.

"I am happy to add that our loss on this occasion has not been considerable. Lieutenant Gordon of the loth Native Infantry, and Cornet Erskine, of the lst Native Cavalry have been wounded, but I hope not dangerously. The number of privates wounded, does not exceed 20, and I believe only two men have been killed."

"I have the honour, &c. &c.

(Signed) G. LAKE."

Head Quarters, Camp before Bhurtpoor, 23rd January, 1805.

Observations.

The British troops behaved gallantly on this occasion; but the enemy succeeded in his object, and out of 12,000, captured 10,200 bullock loads of grain.

If the whole of the Cavalry had been ordered off in proper time, the capture of the convoy might possibly have been prevented.

Reconnoissance is renewed, and the Engineers are collecting materials for further proceedings.

Night between the 20rd and 24th of January.

Began a battery for two 12-pounder field pieces, considerably in front of the left post, and within 400 yards of the ditch. This battery, together with the first breaching battery, and the three 12-pounder battery in the right trench of communication, were intended to play on the batteries and works to our left of the proposed new breaching battery.

Intelligence was, however, received that there was a wet ditch, not only before the Aine gate, but also before the screen which covered the gateway, and it was resolved therefore to suspend the crection of a new breaching battery until certain knowledge of this point was gained.

A gun lascar who had relatives in the town, offered to go in, and bring intelligence. His services were accepted, and he proceeded to ascertain the form and state of the ditch at the Aine gate.

January 24th.

The gun lascar returned, and reported that the screen or ravelin work which covered the gate had no ditch before it, but that before the gate itself there was a broad wet ditch, being the identical ditch of the town brought round; and in front of the gate having a temporary bridge of logs and planks over it, concealed from view by the mud screen.

"As the same impediment of a broad wet ditch lay here as at the former points breached, with the addition of a mud wall screen to be battered before the gate could be seen; and as the gate when battered would still be inaccessible if the temporary bridge was pulled away; lastly, as any breach of the gate would be well defended by the curtain between it and tower No. 3, which would take a storming party in flank, and also by the neck and body of the tower itself, which would take them in reverse, it was thought advisable," says the Commandment of Artillery "to give up the project of attacking the Aine gate."

This day Lieutenant Colonel Don with the sick and wounded of the Army, escorted by the 29th Dragoons, and 2nd Regiment of Native Cavalry, and three Battalions of Native Infantry proceeded to Agra, for a supply of grain and siege ammunition, all former supplies being nearly exhausted.

There is very little grain in camp, only a pound of attah (flour), and two chittacks of daul (split peas or vetches), is allowed each man. It is supposed that the grain now in camp, will not last till the convoy returns, which will be seven days hence.

Orders of the day.—Relief of the trenches: 100 Europeans and 12 companies of Native Infantry, completed to sixty men a company.

All Quarter Masters' establishments to be sent to the Commanding Engineer to morrow morning at 7 o'clock. For duty in the batteries: one Officer of Artillery.

January 25th.

Batteries unemployed. The two-gun-battery at the left post, which was advanced about 200 yards further in front on the night of the 23rd, so as to bear on the two bastions on the right and left of the Komeer gate, and upon the guns on the plain under these bastions, was finished this night. The Quarter Masters' establishments employed in making fascines.

Orders of the day.—Relief of the trenches, same as usual. The usual guard and Quarter Masters' establishments to be sent to the Commanding Engineer. For duty in the battery: one Officer of Artillery.

January 26th.

Making fascines.

Orders of the day.—Relief of the trenches, same as usual. The usual guards and Quarter Masters' establishments to be sent to the Commanding Engineer. For duty in the batteries: one Officer of Artillery.

January 27th.

Making fascines.

Orders of the day.—Relief of the trenches: 100 Europeans and 720 Natives. The usual guards and Quarter Masters' establishments to be sent to the Commanding Engineer. For duty in the batteries: one Officer of Artillery.

January 28th.

Making fascines.

Orders, same as yesterday. For duty in the battery: one Officer of Artillery.

January 29th.

Orders, same as yesterday. For duty in the battery: one Officer of Artillery.

The following was a paper of intelligence given this day to the Commanding Officer of Artillery:—

"From the Aine gate and the Bansee gate to the Combher (Komeer), gate, the water in the ditch is deep. From the Aine gate to the Neemdar gate there is very

little water, in some places 13 foot, and in others somewhat more. From the Neemdar gate to the Ateel gate, the Shumshere gate, and the Muttra gate it is perfectly dry. The Polier and Maharaje brigades are stationed from the Muttra gate to the Shumshere gate, with 21 guns. From the Shumshere gate to the Aine gate there is posted one battalion of 200 men of Bappoo Scindeah, with two guns. At the Ateel gate 3,600 Ally Gholes are encamped, with twelve guns. Rajah Runject Sing has posted himself at the Aine gate with his Dewan, Raj Sing. Buldee Sing, the Rajeh's son, is stationed at the Neem gate, with one gun; and Lutchmoon Sing, another son, at the Muttra gate. Rhunder Sing, the eldest son, has the charge of the fort, and a general superintendence of the lines of defence from the Basseen gate to the Aine gate. He remains constantly prepared with a considerable force."

Continuation of the Journal.

The General, having received accounts that great numbers of the enemy's troops had marched with an intention of cutting off the supplies expected from Agra, moved this morning with the Cavalry remaining in camp, the Horse Artillery, H. M.'s 75th Regiment, with a battalion of Native Infantry to reinforce Colonel Don, and joined him in the afternoon at Ore, about 16 miles from camp. The convoy consisted of 50,000 bullock loads of grain, 800 heavy carriages laden with ammunition, 8,000 rounds of 18-pounder shot, and six lacs of rupees. The Rajah of Bhurtpoor with his auxiliaries, Holkar, Meer Khan, and Bapcojee Scindcah, united their whole strength of Cavalry on this occasion to cut off the convoy, and seven Battalions of the Rajah's infantry ag-

companied their force; but upon information being obtained that our convoy was reinforced, they were sent back to the fort.

Some of the Mahratta horse appeared on the skirts of the convoy during its march this day, but the great bulk and the chiefs moved out as soon as they perceived, by General Lake's direction of route, that he had rounded the town of Bhurtpoor, (marching by his left), and was moving in the Agra road. General Lake effected his junction with Colonel Don, nearly about the same time that the first bodies of Mahratta Cavalry from the neighbourhood of the town arrived on the spot; and from the elevation of the village it was an imposing sight to view the successive masses of Mahratta horse rolling out of the town towards the spot where the Commander in Chief had taken post, interposing himself between them and their intended prey, which was seen slowly approaching through the thick jungle of the road.

The Commander in Chief encamped the detachment thus reinforced at Ore, in the form of a square, which prevented the enemy making any impression on the convoy.

' January 30th.

Orders, same as yesterday. For duty in the batteries: one Officer of Artillety.

The convoy and troops marched this morning at daylight in one solid rectangular mass, the troops formed on all sides, and Horse Artillery, and galloper guus on the flanks and rear exposed to incessant petty attacks from the enemy's horse, but scarcely noticing them. They fired rockets,, and endeavoured to produce confusion, but without effect. The General by directing his march close along the verge of the lake or inundation, which he reached about 3 P. M., freed one of his flanks from molestation, and the enemy on the right, flank, front, and rear, fearful of being intercepted where the lake might have cut off their ready retreat to Bhurtpoor, gradually drew off about 4. At sunset three miles of dangerous and uncovered road to camp remained to be traversed; but at dark, no enemy appearing to take advantage of the confusion, the convoy made the best of its way to camp. The troops, save the rear guards, reached it about 8 o'clock; the cattle and carts were coming in till late the following morning. The enemy suffered pretty severely from our grape shot and skirmishers.

Two Captains and one Lieutenant of Artillery, arrived in camp this morning.

Observations.

The affair of the 23rd occasioned proper precautions being taken to prevent the loss of the second convoy. Nothing could have been better planned, or more steadily and cooly executed, than the protection of the convoy on this occasion.

January 31st.

Batteries and town, as before.

Orders of the day.—Relief of the trenches, same as yesterday. Quarter Masters' establishments and the usual guard to be sent to the Commanding Engineer. For duty in the batteries: one Officer of Artillery.

February 1st.

Batteries and town, as before.

Orders of the day.—Relief of the trenches, same as yesterday. Quarter Masters' establishments and the usual guard to be sent to the Commanding Engineer. For duty in the batteries: one Officer of Artillery.

February 2nd.

Batteries and town, as before.

Orders of the day.—Relief of the trenches, as usual. Quarter Masters' establishments and guard to be sent to the Commanding Engineer. A foraging party of one Regiment of Dragoons, two of Cavalry, one of Native Infantry, and the Horse Artillery, proceeded for three days forage. For duty in the batteries: one Officer of Artillery.

February 3rd.

Batteries and town, as before.

Orders of the day.—Relief of the trenches, as usual. For duty in the batteries: one Officer of Artillery.

Night between the 4th and 5th of February.

A party of Native Infantry took possession of a garden with a brick wall round it, close to the village of Aine, for the purpose of protecting a reconnoiting party, which was to move forward from it in the morning to examine the Neemdar gate.

Observations.

The last storm took place on the 21st ultimo; on the 23rd an attempt was made to reconnoitre the Aine gate, and it was determined to erect a battery to breach it. This determination was however suspended until it could be ascertained whether or not there was any water in

that part of the ditch; from the information obtained on the 24th ultimo, and for the reasons given in that day's journal, this intention was, however, finally given up. An interval of eleven days now took place without any further reconnoissance. The cause of this is not explained; but it is understood that the attention of the heads of the Artillery and Engineer departments was at this period turned to the construction of boats of wicker work covered with hides, rafts buoyed up with oil-skin casks, bridge ladders floated by barrels, with other expedients for passing the wet ditch: but it seems doubtful whether any of these could have been successfully applied by a storming party exposed to a cross fire in the heat of assault.

Much valuable time appears to have been suffered to pass without proper reconnoissance, while neither energy nor exertion should have been spared to have obtained, by every possible means, full and correct information of every part of the enemy's defences and works.

February 4th.

"Proceeded this morning," says the Commandant of Artillery, "to within 400 yards of the town wall, and about 300 to the left of the spot afterwards called Grant's post, which lay to the right.—Had a very imperfect view of the entrance leading into the Neemdar gate, the trees entirely hiding the wall, except a narrow strip below. The enemy taking the alarm, drove in their cattle through a passage supposed to lead to the gate. The enemy fired at the party reconnoitring, which being unable to make any discovery of the gate, returned."

Orders of the day.—Relief of the trenches: 100 Europeans and 700 Native Infantry. All Quarter Masters'

establishments to be sent to the Commanding Engineer. For duty in the batteries: one Officer of Artillery.

Night between the 4th and 5th of February.

As soon as it was dark a party of Europeans and Native Infantry proceeded to the spot reconnoitred from during the day, and entrenched themselves so as to form a kind of parallel, the right of which lay opposite to the Neemdar gate, about 600 yards from the town wall, and 300 from the rising ground afterwards called Grant's post; the left of the parallel was about 400 yards from the town; the line curving from the right towards the town.

Observations.

This is the first time any thing like a parallel is mentioned, but it was in fact only a narrow trench, supplying the place of one. Its being commenced previous to the erection of batteries indicates, however, that something in imitation of a regular attack is at length contemplated.

• February 5th.

Worked at the parallel to finish it. The enemy took post on the high ground to our right, afterwards called Grant's post, and kept up an annoying fire from guns and musketry on the right flank of the new trenches. Old batteries kept firing at the towers of the town, and sometimes at the enemy's posts outside.

Orders of the day.—Relief of the trenches: 50 Europeans and 600 Native Infantry. Relief of the new trenches: 130 Europeans and 600 Native Infantry. For duty in the batteries: one Officer of Artillery.

February 6th.

The Army changed ground this morning, leaving a piquet in the village of Aine, and another in the advanced post in its front, and moved into a new position in a south-east direction, nearer to the wood to the right of the former encampment, about 2,500 yards from the town. The enemy's horse were driven back from the vicinity of the new camp, and possession was taken of a village in front of its right flank.

Not being able to obtain any knowledge of the works at the Neemdar gate, it was now determined to breach the curtain, situated between towers, Nos. 3 and 4.

Orders of the day.—Relief of the old trenches: 50 Europeans and 600 Native Infantry. Relief of the new trenches: 150 Europeans and 600 Native Infantry. For duty in the batteries: one Officer of Atillery.

Observations.

The Army had been in the old camp more than a month; the movement to a new ground was a measure beneficial to health, while it was convenient to the carrying on of the attack now determined to be made on a new front of the fort.

There is no detail in the journals of any information being obtained regarding the ditch of the curtain between batteries Nos. 3 and 4; but it appears again determined to breach a curtain flanked by bastions, which took it in reverse.

Employed in carrying on and finishing the new parallel. Commenced a battery to the right of the new trenches, for two 12 pounders and two 43 howitzer field

Night between the 6th and 7th of February.

pieces to keep in check the guns in the enemy's outposts on the high ground to the right.

A village and bank of a tank, about 250 yards to the front and right of the parallel, forms the left flank, and support of a counter-trench or parallel which the enemy have thrown up.

Observations.

This outpost of the enemy which gave cover to several guns and to a considerable body of troops might have been seized with advantage. By possessing it the enemy's trenches might have been commanded, and possibly turned to some account.

February 7th.

Orders of the day.—Relief of the new trenches: 200 Europeans and 600 Native Infantry. Relief of the old trenches: 50 Europeans and 600 Native Infantry.

Night between the 7th and 8th of February.

Commenced a new breaching battery for four 18 and two 24-pounders. Finished the field piece battery which was commenced last night, and armed it before morning.

The new breaching battery is situated to the left and front of the new parallel, 330 yards from bastion No. 4, 400 yards from bastion No. 3, and 430 yards from their connecting curtain, which is the object to be breached.

February 8th.

A detachment under the command of General Smith, consisting of the Horse Artillery, H. M.'s 8th, 27th, and 29th Dragodns, and the 1st, 3rd, and 6th Regiments of Bengal Native Cavalry, in all about 1,800 effective men.

marched this day in pursuit of Meer Khan, who yesterday decamped towards Muttra, and crossed the Jumna with his whole army of horse.

"Since the attack on our convoy of the 29th ultimo," says Major Thorn, "the Rajah, finding the Cavalry of his allies invariably defeated whenever they came in contact with our troops, began, it is understood, to be weary of an incumbrance which put him to a great daily expense of money and provisions, and yet effected nothing in his favour. His discontent broke out into open complaints, the several chiefs attempted to screen their respective forces from blame, and widened the breach by throwing reflections on each other. It was this contention that determined Meer Khan to separate himself from the rest, for the purpose of plundering the British possession in Rhohilcund, his native district, where he expected to be joined by many turbulent characters, who viewed the recent establishment of the British government in that province, lately obtained from the Nawaub of Oude, as fatal to their interests."

Meer Khan seems also to have been encouraged to this enterprize by the peculiar situation in which General Lake's Army now stood: defeated in two assaults, it probably appeared to him unlikely that any force could possibly be spared to act separately against him without causing the siege to be raised, and this he was aware, from the character of General Lake, was a very improbable contingency.

Orders of the day.—Relief of the trenches: 200 Europeans and one Battalion of Native Infantry. Relief of the old trenches: 50 Europeans and one Battalion of Native Infantry. Foraging party: one Battalion of Native Infantry, the whole of the Hindoostanee Refugee

Cavalry off duty, six troops and three galloper guns of Native Cavalry. The Field Officer of the day is in future to discharge the duties of General Officer of the camp.

The General Officer of the trenches is in future to take up his station in the new trenches; and the senior Officer on duty in the old trenches to attend at Head Quarters every evening at 5 o'clock for instructions.

Observations.

There were now only two weak Regiments of Cavalry in camp.

Night between the 8th and 9th of February. Working at the new breaching battery.

February 9th.

Orders of the day.—Relief of the old trenches: 59 Europeans and one Battalion of Native Infantry. Relief of the new trenches: 200 Europeans and one Battalion of Native Infantry. All Quarter Masters' establishments under the usual guard to be sent to the Commanding Engineer at 7 o'clock to-morrow morning. The Field Officer of the day to order the guard.

Night between the 9th and 10th of February.

Finished the new breaching battery, and armed it with four 18 and two 24-pounders.

Erected a battery for four 5½-inch mortars behind a mound of earth, about 150 yards to the left of the new breaching battery, close to a dry tank which is situated between the Sand-hill post and the battery. This tank is about 400 yards from the sand hill.

Six 18-pounders were left in the former breaching battery, as much to distract the attention of the enemy and lead them to imagine it was our intention to open the last breach (now built up), as to fire upon tower No. 3, and the screen covering the Aine gate, which extended up to the town, affording a parapet for numerous marksmen, who kept up a fire of matchlocks on the new lines of attack.

The three 12-pounder field pieces stationed in the right branch of the old trenches, were left to direct their fire on the same object.

This night a trench of approach, from the left of the new breaching battery towards the new mortar battery at the dry tank and depôt, was commenced upon.

Observations.

If the 5½-inch mortar battery had been thrown more forward, so as to command a plunging fire on the breach previous to the storm, or on it and its defences during the approach to an assault, it might have been of utility.

Although No intention of attacking the front formerly breached existed, yet six battering guns out of twelve are engaged on that side of the fort, while the defences of the front really attacked, are left uninjured.

February 10th.

In the morning the new breaching battery opened on the curtains, between bastions Nos. 3 and 4, which it was intended to breach, but it could scarcely be seen, the trees in front of the battery intercepting the view.

The four $5\frac{1}{2}$ inch mortars also opened this day, being answered from the town by several guns on towers Nos. 1, 3, 4 and 5.

The batteries of the old trenches answered the guns of No. 3 bastion, and the musketry from the screen of the Aine gate.

The fire of the field piece battery to the right of the new parallel, was also directed on the enemy's guns in that quarter, as often as fired, or as they could be seen, which was seldom, as they were shifted from place to place.

Orders of the day.—Relief of the old trenches: 50 Europeans and one Battalion of Native Infantry. Relief of the new trenches: 200 Europeans and one Battalion of Native Infantry.

Observations.

Much of our fire was directed upon objects not very worthy of attention, and we are again precipitate in attempting to breach before the counter-scarp is thrown down, or the works are advanced to the crest of the glacis.

February 11th.

Batteries and town, as yesterday.

By 12 at noon the trees which intercepted the view of the breach, were cleared of their tops, and the rampart of the curtain appeared beaten down into a fine practicable breach.

The town kept up a smart fire, saluting the battery with showers of grape from the opposite bastions. The enemy's battery also, on the right of the new parallel, kept up a smart fire on the works within its range.

This day Major General Jones, with a detachment of the Bombay Army, viz. two companies of Artillery, eight companies of His Majesty's 65th, and the whole of His Majesty's 86th Regiments of foot—four Battalions of Bombay Native Infantry—two 12-pounders, two howitzers, and twelve 6-pounder field pieces—a troop of Bombay Cavalry, and 500 irregular horse, in all about 700 European and 2,400 Native Infantry and Cavalry, joined the Army.

Orders of the day.—Relief of the old trenches: 50 Europeans and one Battalian Native Infantry. Relief of the new trenches: 200 Europeans and one Battalian of Native Infantry. All Quarter Masters' establishments with the usual guard to be sent to the Commanding Engineer to-morrow morning at 7 o'clock.

Observations.

At noon the slope of the breach appeared, to the Officer commanding the Artillery, practicable for the troops to ascend; but as the trenches for covering the advance of the storming party were not completed, the advanced parallel not commenced upon, nor the enemy's works which defended the breach destroyed, no assault could have been given with any better chance of success than before. This breach was therefore made as prematurely as either of the two former.

Volleys of grape continued to be showered on the batteries from the enemy's bastions, and the guns in their outposts on the right of the new parallel, in a great degree enfiladed that trench, checked only occasionally by the field pieces stationed in it.

Night between the 11th and 12th of February.

A trench of approach was commenced this night, directed towards tower No. 3; the approach is only intended to enable the storming party to get pretty near to the ditch, under cover from the enemy's fire.

Observations.

Trenches to cover the advance of the storming party ought to have been finished previous to forming the breach. This trench was too directly turned upon the fort, and subjected to enfilled; and the enemy's defences in front not having been destroyed, commanded it.

February 12th.

At daybreak it was discovered that the enemy had raised a thick mud wall in rear of the new breach, for the purpose of thickening the rampart on that point, in order that the ends or trunks of the trees to be used as the stockade might have firm hold in it. The battery directed its fire for the purpose of destroying this defence.

Orders of the day.—Relief of the old trenches: 50 European's and one Battalion of Native Infantry. Relief of the new trenches: 200 Europeans and one Battalion of Native Infantry.

The 2nd Battalion 2nd Regiment is ordered to return to camp at 4 o'clock this afternoon; and the village of Mallaw is in future to be occupied by two companies and two 6-pounders from the Bombay Army. Quarter Masters' establishments with the usual guard to be sent to the Commanding Engineer's tent to-morrow morning at 7 o'clock. The Commanding Engineer is directed to attend at Head Quarters daily at 1 o'clock.

Observations.

A musketry fire on the breach not having been established, the enemy fortified it as usual by stockading during the night, and the previous proceedings were, as in former instances, rendered nugatory.

Night between the 12th and 13th of February.

Trench of approach carried on and deepened.

February 13th.

At daybreak it was perceived that the enemy had completely stockaded the breach.

The battery again employed in clearing away the earth and timbers of the stockade, and in battering down the wall; fired occasionally at the bastions which on the enemy's side was returned by guns drawn back into the area of the towers as soon as fired, in this situation our guns could not reach them.*

The town fired as usual, and was answered by the battery and posts in the old trenches.

Orders of the day.—Relief of the old trenches: 50 Europeans and one Battalion of Native Infantry. Relief of the new trenches: 200 Europeans and one Battalion of Native Infantry.

All Quarter Masters' establishments with the usual guard to be sent to the Commanding Engineer, at 7 o'clock to-morrow morning.

Observations.

For want of means to prevent the enemy resorting to this obvious and easy mode of defence, the first breach was thrice stockaded, the second five times, and the third was now stockaded for the second time.

Night between the 13th and 14th February.

Batteries for one 10-inch and three 8-inch mortars were erected this night: that for the 8-inch mortars close

[•] Had our howitzers been placed on the line of the capitals of the bastions produced, shells from thence, by plunging into the area of the bastions, would have rendered the drawing back of their guns a measure of little safety to the enemy,—Compiler.

to the left of the new breaching battery, but on the opposite side of the trench; that for the 10-inch mortar on the right of the new breaching battery.

Observations.

Four mortars were not capable to produce any effect in the way of Bombardment. We may here remark, that he prolongation of the capital of the bastions appears to us, the most proper line of fire for such mortar batteries. Where there is no rownee or fausebray, the body and neck of the bastions of a Hindoostanee fortification, are generally the spots on which guns are lodged, and form places of arms. The curtains seldom contain guns, and but few men, except mere marksmen. The bastions are not only from their form more exposed than the curtains to a plunging fire of mortars, but as they generally contain the enemy's principal resources, seem to us to be the objects most worthy of such a fire.

February 14th.

In the morning it was discovered that the enemy, had again stockaded the breach as well as repaired the embrazures of the towers adjoining it.

Batteries employed in clearing away these repairs, and in taking off the defences of the neck of tower No. 3.

Opened this morning the new mortar batteries on the right, and left of the new breaching battery.

Several attempts have been made by individuals to get up to the ditch, but the nights being moonlight no one it is believed ventured very near it.

Orders of the day.—Relief of the old trenches: 50 Europeans and one Battalion of Native Infantry. Relief of the new trenches: 200 Europeans and one Battalion

of Native Infantry. All Quarter Masters' establishments, and the usual guard to be sent to-morrow morning at 11 o'clock to the Commanding Engineer.

Observations.

Since the commencement of the siege, this is the 11th time the enemy has stockaded the breach, in consequence of the want so often noticed of a preventive fire.

Night between the 14th and 15th of February.

Pushed on the trench of approach towards tower No. 3, occasionally saluted with grape shot from the bastion. Began a sand-bag battery in the approach, for two 12 pounder field pieces to take off the defences of the flank, and neck of tower No. 4: this battery is 150 yards distant from tower No. 3.

February 15th.

Operations on both sides, as yesterday.

Orders of the day.—Relief of the old trenches: 50 Europeans, and one Battalion of Native Infantry. Relief of the new trenches: 200 Europeans, and one Battalion of Native Infantry. All Quarter Masters' establishments and the usual guard to be sent to the Commanding Engineer at 7 o'clock to-morrow morning.

Night between the 15th and 16th of February.

Trench of approach carried 60 yards directly forward from the left of the new sand-bag, battery towards the ditch of the curtain between towers No. 3 and 4. The 12-pounders sand-bag battery finished this night.

February 16th.

The two 12-pounder field pieces in the sand-bag battery opened this morning on the flank and neck of tower No. 4. Other operations on both sides, same as yesterday, and batteries kept beating down the stockade.

This day the Cavalry grass-cutters under an escort of 30 troopers were attacked, and 10 troopers killed and wounded, besides many grass-cutters cut up by the enemy.

Orders of the day.—Relief of the old trenches: 50 Europeans and one Battalion of Native Infantry. Relief of the new trenches: 200 Europeans and one Battalion of Native Infantry. All Quarter Masters' establishments with the usual guard to be sent to the Commanding Engineer to-morrow.

Night between the 16th and 17th of February.

Approach carried on towards No. 3, tower bastion. As the defences of the tower in front of this approach were not sufficiently destroyed, it was made in some parts from 10 to 12 feet deep, in order to avoid the commanding enfilade which was maintained upon it.

February 17th.

Firing on both sides; continued as before.

Night between the 17th and 18th of February.

Approach towards tower, No. 3, carried on 46 yards. About this time the gallery of a mine to blow in the counter-scarp was commenced upon in a part of this trench.

. February 18th.

Firing on both sides, as yesterday.

Night between the 18th and 19th of February.

No. 3, to afford shelter for two 6-pounder field pieces, which were intended to be placed in it, whenever the storm should be ordered, to silence the guns in the gorge of tower No. 4. Trench of approach carried on 20 yards, and a small parallel commenced at the end of it.

February 19th.

Early this morning the unfinished sand-bag battery was assaulted by the enemy, who, accompanied by coolies and women, emptied the sand-bags, and carried a great part of them away into the town, thereby destroying the battery.

Observations.

Previous to carrying on so direct an advance of the trench as mentioned in the journal of the night between the 15th and 16th instant, a proper place of arms ought to have been established to defend it; the want of this, together with the trench itself being so very narrow and deep, without banquette steps, and directly enfiladed by the fort, will account for this truly mortifying success of the enemy.

Working at the trench of approach towards tower No. 3, and the parallel at the end of it. Our working party left their work some time before daybreak, and several of the enemy crept into the end of the approach, and remained there.

The General having now determined to storm the breach as soon as the batteries had sufficiently cleared the stockade, the following arrangements were made:—

Night between the 19th and 20th of February.

Three columns were ordered for the attack: the left column commanded by Lieut. Colonel Don, to assault the breach; the second column under Captain Grant of the Bombay division, to carry the enemy's outposts, entrenchments, and guns on the right and front of our new parallel, and to endeavour to enter the town along with the fugitives; while the right column, commanded by Lieutenant Colonel Taylor, second in command of the Bombay troops, was to attack and blow open the Beem Nurrain gate, or make an entrance by escalading the wall at that point. The left column consisted of all the European corps in the camp of the Bengal Army, and the whole of the 1st and 2nd Battalions of the 12th, and the 1st Battalion 15th Regiment of Bengal Native Infantry. The centre column, of 200 men of H. M.'s 86th Regiment, and the whole of the 1st Battalion 8th Regiment of Native Infantry. The left column, of 200 men of H. M.'s 65th Regiment, and two Battalions of Bombay Native Infantry.

February 20th.

About daylight the Europeans of the principal or left column arrived at the trenches, being ordered to occupy the dry tank to the left of the new breaching battery, where they were to remain sheltered by the bank, until ordered for the assault, when they were to occupy the left approach, and sally out from the little parallel at the end of it, next to tower No. 3, and thence move to the breach.

This party had only just reached their destination, when the whole of our trenches were attacked by the enemy: those at the old batteries but faintly. The attack was supposed to have been occasioned by the ene-

my seeing some of our scaling ladders in the trenches; it was supported by those who, in the early part of the morning, had previously taken possession of our small advanced parallel. Running along the top of the approach with pikes, spears, and swords, the enemy jumped into our trenches, and killed and wounded several. Lieutenant Stuart, of H. M.'s 75th, was killed on this occasion. The enemy advanced, fighting desperately, and drove the Europeans back three different times, till met by the gallant flankers of H. M.'s 22nd, who stopped their progress and repulsed them. The trench being very deep and narrow, unprovided with banquette steps to enable our men to level over, or to ascend it, our troops were not able to close with the enemy, and unable to use either their bayonets or muskets with effect: they fought under great disadvantage.

The approach to the left of the new breaching battery nearest tower No. 3, was carried by the enemy sword in hand, and they kept possession of the small parallel at the end of it, and of the unfinished mine gallery the greater part of the day.

The three Battalions of Native Infantry belonging to the left column, destined for the assault of the breach, moved into the trenches at 3 P. M. At 4 P. M. the centre column being already engaged in attacking the enemy's outposts outside the town, and this being the signal for the storming party to advance, the left column was ordered to move out of the trenches. The Europeans forming the head of the column were ordered to sally forth from the little parallel at the end of the left approach, and the Native Infantry were ordered to follow them from that point to the breach. It was intended that fifty men carrying fascines should precede the Europeans,

and throwing the fascines into the ditch, should wheel outwards, and spread themselves on the glacis, to keep up a fire of musketry on the breach, while the rest of the party proceeded to the assault. But owing to the imperfect construction of the parallel—to the enfilading fire kept up upon the approach—to an idea which the men readily caught, that the enemy, during the considerable time they had been in possession of the extremity of the trench in the morning, might have established a mine of their own in our unfinished gallery—to the gloom spread by the distracted conduct and the dismal and discouraging gioans of the wounded and dying, who, after the sally in the morning, had been left, some wandering about the trenches, others lying exposed to the enemy's fire. The Europeans in front would not move out; while the Native troops in their rear, owing to the narrowness of the trench, could not get on, till they had passed. Some of the flankers of H. M.'s 22nd advan ced to the most forward point of the approach, which remained in our possession, but not being supported by the other European corps, they retired.

The two Battalions of the 12th Regiment of Native Infantry were now ordered out, and, led on gallantly by Colonel Don and their Officers, moved out from the right of the new breaching battery, and pushed on to the ditch, accompanied by two 6-pounders under Lieutenant Swiney, to fire grape at the defences.

Instead of proceeding to the breach, (which a tall sepoy by running into the ditch had shewn to be cut off by deep water as before), the column moved to the nearest damaged or rugged point, viz. the tower bastion, No. 4, and here descending into the ditch, which was found to have little water in it, they scrambled up, assisting

their steps by laying hold of the shrubs growing on the face of the bastion.

Having ascended as far as the slope of the tower and the assistance derived from the roots and wild bushes enabled them, most of the column stopped; some however got even to the summit. The colours of the 12th Regiment of Native Infantry, were placed near the summit, but sufficient numbers could not get up to maintain by united efforts a footing at the top.

No order or entreaty could induce those who had not clambered the tower, and others who stood in crowds below, to turn the foot of the tower, or push on to the breach in the curtain.

The party remained on the face of the tower, opposed by the enemy with spears, logs of wood, fire pots, and other missiles, and after being exposed for nearly an hour and a half, they were ordered down, and all at once the whole ran back to the battery.

The Europeans kept close to the left of the approach, until the Native Infantry mounted the tower. Some then fancied the place taken, and moving out of the trenches, about forty of them pushed after the sepoys—one was blown away by a gun as he boldly entered the embrazure of the tower, and another was cut to pieces in reaching the summit—those who escaped, returned at the same time with the sepoys.

The enemy resisted principally by throwing earthen vessels full of powder, supplied with a quickmatch. They did not appear in great force at the breach; the attack of the right column had distracted their attention, and alarmed them.

Soon after the assault was made, a mine was sprung by the enemy in the breach, and three others in the counter-scarp: but these did no harm. The breach was, indeed, thereby rendered larger and easier of access; and if the European troops had at this moment pushed out from the left of the trenches, and proceeded boldly after their Officers, in as gallant a manner as the Native Infantry, the sepoys who stood in crowds at the bottom of tower No. 4, would also probably have moved on, and either have assaulted the flank of tower No. 3, or supported the Europeans in carrying the breach.

The centre column, consisting of 200 men of H. M.'s' 86th foot, and one Battalion of Bengal Native Infantry, (1st Battalion 8th Regiment), who had gone down to the trenches in the forenoon, moved out shortly after 3 o'clock as had been ordered, and carried the entrenchments and batteries on the high ground to the right of the new parallel. Pursuing the fugitives, this party pushed on to the walls of the town, and were nearly getting into the place, the enemy being just able to close their gates on the foremost of the column, which, (not having any guns), was unable to open them by force. Eleven guns were captured in the enemy's outposts, of which possession was taken, and the column here established themselves on the broad dry margin of the tank or pond covered by its bank. 'This post was called, from the Officer commanding this column of attack, "Grant's post."

Lieutenant Colonel Taylor's column, consisting of 300 men of H. M.'s 65th foot, and two Battalions of Bombay Native Infantry, were to have attacked the Beem Narrain gate further to our right, but having lost their scaling ladders, and having had one of their 12-pounders dismounted by a shot from the town, considering it impracticable to force the gateway, they retreated to camp.

In the evening, it having been reported to the Commander in Chief by some Officers in his confidence, that if tower No. 4, got half a day's battering, it might be easily stormed, it was ordered by His Excellency to be battered.

The Commander in Chief addressed the following reports to Government:—

To His Excellency the Most Noble Marquess Wellesley, Governor General, &c. &c.

"My Lord,

- "I am much concerned to inform your Lordship, that the troops have been unsuccessful in an attempt which was made to carry the town of Bhurtpoor by assault this afternoon.
- "I shall have the honour to inform your Lordship as soon as possible of the particulars of this affair, and the loss which has been sustained.
- "Several guns belonging to the enemy on the outside of the walls have been taken, and I have sanguine hopes that in a very short time I shall be enabled to renew the attack with every possibility of success."

"I have the honour, &c. &c.

(Signed) G. LAKE."

To His Excellency the Most Noble Marquess Wellcsley, Governor General, &c. &c.

"MY LORDS

- "My despatch of the 20th will have informed your Lordship of our failure that day in an attempt to carry Bhurtpoor by assault.
- "I have now the honour to detail for your Lordship's information the plans which were formed to insure, if possible, the success of the attempt.

"The storming party under the orders of Lieutenant Colonel Don, was formed of the greatest part of the European force belonging to the Bengal Army, and three Battalions of Sepoys.

"One column, composed of 200 of H. M.'s 86th Regiment from the Bombay division, and the 1st Battalion 8th Regiment Bengal Native Infantry, under Captain Grant, of the former corps, were ordered to attack the enemy's trenches and guns outside the town; whilst a third column, composed of 200 of H. M.'s 65th Regiment, and two Battalions of Bombay sepoys, marched to attack the Beem Narrain gate, which from every report I had received, was easy of access for guns, &c.

"The signal for the storming party to move out was the commencement of Captain Grant's attack on the enemy's trenches, which took place a little before 4 o'clock in the afternoon.

"Captain Grant's column was completely successful, and got immediate possession of the enemy's guns, eleven in number, all of which have been brought into camp. The gallant conduct of Captain Grant and his party merits praise.

"I am sorry that neither of the other columns succeeded. Lieutenant Colonel Don's was unfortunately delayed by some unexpected circumstances, and on its arrival at the ditch, it was found to contain such a depth of water as to render it impossible to gain the breach. The troops immediately attempted to ascend by the bastion, but the obstacles they met with were of so serious a nature, that their utmost efforts were unsuccessful, though the colours of the 12th Native Infantry were planted within a short distance from the top.

"The column from the Bombay division under Lieutenant Colonel Taylor, notwithstanding every exertion, could not effect its object. They were considerably delayed in their march by a large body of the enemy's horse, and by a mistake on the part of their guide, were very early exposed to a most heavy and destructive fire from the town, which by destroying their ladders, rendered the attack on the gate impracticable, and obliged Lieutenant Colonel Taylor to withdraw his men under cover, until he received orders to return to camp.

"I feel it my duty to assure your Lordship that, though unfortunately not crowned with success, the exertions of Colonel Donwere meritorious and gallant in the extreme, and I feel under infinite obligations to that Officer.

"I have the honour, &c. &c.

(Signed) G. LAKE."

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Return of Wounded, and Missing, in the Assault of Blurtpoor, on the 20th of February, 1805.

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Names of Officers killed, wounded, and missing.

H. M.'s 75th Regiment—Lieutenant A. Stuart.

Artillery-Captain J. Nelly; Lieutenant G. Swiney, and Conductor Whale.

H. M.'s 65th Regiment—Captain Bates; Lieutenants Bates, and Hutchins.

H. M.'s 75th Regiment—Captain W. Boyce; Lieutenants Hamilton, and Mansell.

European Regiment -(tince dead) Lieut. Moore.

8th Native Regiment-(since dead) Lieut. Kerr.

1st Battalion 12th Regiment—Major J. Radcliffe; Lieutenants C. Boyne, and J. Taylor.

2nd Batt. 12th Regiment—Captain Fletcher; Lieutetenants J. Barker, J. Drysdale, and J. Aymer.

1st Battalion 15th Regiment—Lieutenants H. Sibley, and W. D. Turner.

2nd Battalion 22nd Regiment—Captain Griffiths, and Lieutenant Blackney.

Pioneer Corps-Lieutenant A. Lockett.

Bombay division, 1st Grenadiers-Captain Steele.

Ditto Ist ditto 9th ditto—Capt. Haddington; and Lieutenant Morrison.

Observations.

In reviewing the proceedings since, the last assault, we find an interval of a month between the 2nd and 3rd attempt to storm the place.

The first two weeks after the 21st January, passed away in obtaining such provisions and military stores, as were necessary to support the Army in prosecuting the siege—in devising means wherewith to pass the wet

ditch—in arranging plans and fixing upon points of attack, constantly varying with every feeble and imperfect reconnoissance, and in accumulating materials for new batteries and trenches.

Fifteen days previous to the third assault the Army took up a new position, and broke ground for a new attack. Small as our means were, they were rendered still more inefficient by being directed to two distinct faces of the town.—The old attack was not abandoned. although the new one alone required much more Artillery than the Army possessed; the third breaching battery was opened, five days after breaking ground on the new front; and the breach itself was considered practicable ter days previous to the assault. The enemy had therefore so much time given him to prepare for defence. The breaching battery opened, as on former occasions, without a line of fire being established to keep the breach open during the night, and the enemy again regularly presented a stockade every morning-nortar batteries were erected; but with as little advantage as before—a hattery to destroy the parapet defending the breach was completed; but it was a battery of field pieces—an approach to cover the troops when marching to the storm was advanced; but subjected to capture by not being furnished with proper banquette steps, and not being defended by a proper parallel, as well as by being turned so as to be directly commanded by an enfilading fire from the garrisón-and this unfinished road, in place of being roomy and capacious, was a mere pathway at the bottom of a narrow ditch (if we may so speak), in some places above 10 feet deep.

In the proceedings of this period a whole month was wasted to no purpose; a third series of ill-concerted

operations being closed with a premature, and therefore unsuccessful attack.

The early proceedings on the occasion of this third attack bear the stamp of regularity; but the impatient spirit which urged former operations soon shewed itself in this. In opening a breaching battery before an advanced parallel had been effected-in ordering an assault before the trenches were properly widened, or the advanced one properly banquetted-in storming the place before the escarp was breached, the counterscarp blown in, or the descent into the ditch in front of the breach otherwise effected:-in all this we trace for the third time an expectation of possession being obtained solely by the valour of the troops, and for the first time we find this expectation unwarranted by the conduct of a portion of the European soldiery; while the Native Infantry, possessed perhaps with a spirit of greater attachment to their Officers, with less reflection than their European brethren, left them behind and gallantly pushed on to the breach.

On this occasion 22 Europeans, and a like number of Native Officers, and 835 rank and file were killed and wounded: a great, but fruitless expenditure of valuable life.

Night between the 20th and 21st of February.

All the embrazures of the new breaching battery, which did not bear upon tower No. 4, were in the course of this night turned towards it.

February 21st.

[&]quot;Impressed with deep concern at what had happened yesterday, the Commander in Chief," says Major

There, *appeared upon the Parade this morming, and addressed the European Troops in terms of affectionate tegret. He expressed his sorrow that by not following their Officers, they had yesterday lost the laurels which had been gained on so many previous occasions; but, that being yet willing to give them an opportunity of retrieving their reputation, he now called on such as chose to volunteer to step out."

"They volunteered," he adds, "to a man;" and Lieutenant Templeton offered to lead the forlorn hope: 200 men were selected for this purpose to each of whom a reward of 100 rupees was promised, if the storm proved successful.

In the morning the new breaching battery directed its fire, as had been ordered, upon tower No. 4, as well as occasionally upon the breach and flank of No. 3. The breach did not appear to have been much repaired during the night.

At 2 o'clock it was observed that the upper part of tower No. 4, was still steep, and this was particularly reported by the senior Officer of Artillery. But as it was thought, that by winding round the tower to the point where its flank joined the neck, (the slope of which had been made more easy than it originally had been by the fire from the two 12-pounders in the left trench), the troops might probably make their way up the flank of the tower, while others pushed on to the breach. The General determined to order a fourth assault, which accordingly took place about 4 P. M.

The storming party consisted of H. M.'s 65th, 76th, and 86th Regiments; the flank companies of H. M.'s 22nd; the 1st Battalion 2nd, and 15th Regiments of Native Infantry, and the Bombay Grenadier Battalion,

manded by Colonel Monson. In passing the General, the party greeted him with cheers. They moved regularly and boldly to tower No. 4, and attempted to ascend it; but this bastion was, (as reported), extremely steep. The gap which had been made in its lower extremities, sheltered those who could avail themselves of its protection; but there was no possibility of getting from thence to the summit in sufficient numbers.

Several of the soldiers drove their bayonets into the earthen rampart, one above another, and endeavoured by these steps to reach the top, but they were knocked down by logs of wood, powder pots, large shot, and various missiles from above; others attempted to get up by the shot holes, which the guns had here and there made: but as only two at the most could advance abreast in this way; those who ventured were soon killed, and when one man fell, he brought down with him all who were immediately beneath. All this time the enemy on the bastion kept up a sweeping and destructive fire. Lieutenant Templeton, who volunteered to head the party was killed just as he had planted the colours near the summit, and Major Menzies, who on obtaining leave from the Commander in Chief, had flown to the field of action, was slain after having actually gained the perilous eminence of the breach.

The Engineer Officer, Ensign Jones, placed two short ladders on the walls of the tower which reached to the top of it; but no one mounted them—the number of ladders being insufficient for any united attempt at escalade.

During this struggle, several efforts were made to ascend the curtain and other places, wherever the soldiers

could discern an opening that promised them a chance of success; the enemy keeping up an incessant fire of grape, and the people on the walls continually throwing down ponderous pieces of timber, and flaming packs of cotton, previously dipped in oil, followed by pots filled with gunpowder and other combustibles, the explosion of which had a terrible effect. The struggle was carried on with the most determined resolution on both sides, and our troops evinced throughout the conflict, an astonishing degree of courage; but at length intimidated by the fierce opposition of the enemy, and concluding that further attempts were hopeless, after two hours arduous and unparalleled exertion, they relinquished the attempt and returned to the trenches.

To-day, as on the former occasion, no man moved round the foot of the tower towards its flank or onwards towards the breach, Major Menzies excepted, who lost his life in the attempt.

On the orders for retreat being given, the storming party ran down the face of the tower to the batteries; the enemy firing furiously from fire arms, and guns loaded with grape. The scaling ladders, and many of the wounded, were left behind.

The British loss on this occasion amounted to 29 European and 23 Native Officers, and 933 rank and file killed and wounded: making a loss of 96 Officers and 1,768 men in two days.

The Commander in Chief this day addressed the following reports to Government:—

To His Excellency the Most Noble Marquess Wellesley, Governor General, &c. &c.

"My Lord,

- "I have sincere grief in reporting to your Lordship that a fourth attempt was made to carry the town of Bhurtpoor by assault this day, which has proved unsuccessful; notwithstanding all possible exertion was made by all description of troops engaged, their efforts proved useless, and they were obliged to retire.
- "Detailed accounts will be forwarded to your Lord-ship to-morrow."

"I have the honour, &c. &c.

(Signed) G. LAKE."

To His Excellency the Most Noble Marquess Wellesley, Governor General, &c. &c.

" My LORD.

- "My despatches of yesterday's date will have conveyed to your Lordship our want of success in a fourth attempt made to carry this place with assault.
- "As it appeared that our failure on the 20th was to be accounted for, in a great measure, by the unexpected accidents and delays, as part of the corps who formed the storming party had surmounted the principal difficulty, and had nearly gained the summit of the bastion, where, I was informed, a few more hours battering would render the ascent perfectly easy. I determined to make another attempt yesterday.
- "The party for this service, consisted of the whole of the European force and two Battalions of Native Infantry of the Bengal Army—the greater part of H. M.'s 65th and 86th Regiments, and the Grenadier Battalion and flank.companies of the 1st Battalion 3rd Regiment

from the Bombay division. The whole moved on to the attack about 3 o'clock in the afternoon, under the command of the Honourable Brigadier Monson.

"The troops, most confident of success, commenced the attack and persevered in it for a considerable length of time, with the most determined bravery; but their utmost exertions were not sufficient to gain the top of the breach: the bastion which was the point of attack was extremely steep—the resistance opposed to them was vigorous—and, as our men could only mount by small parties at a time, the advantages were very great on the side of the enemy. Discharges of grape, logs of wood, and pots filled with combustible materials, immediately knocked down those who were ascending, and the whole party, after being engaged in an obstinate conflict for two hours, and suffering very severe loss, were obliged to relinquish the attempt, and retire to our trenches.

"I have to lament the loss of very many gallant Officers, as will appear to your Lordship by the accompanying return of killed and wounded on this occasion.

"It is with sincere grief that I inform your Lordship, that among the killed is my Aid-de camp, Major Menzies, of H. M.'s 80th Regiment, who proceeded with the storming party, and fell among the foremost; he was making the most heroic exertions to ascend the breach. I feel severe sorrow for his loss, no less on account of the great regard I entertained for his private worth, than from the high estimation I held his merits as an Officer.

"The Honourable Colonel Monson, to whom the conduct of the attack was entrusted, made every possible exertion, and has received my best thanks for his uncommon gallantry and perseverance on that occasion."

"Though the troops were unable to effect their object, I am happy to assure your Lordship, that they have on no occasion displayed greater steadiness. Those of the Bengal Army supported their former character, and the Bombay division displayed a degree of resolution and discipline which entitles them to my highest praise and approbation."

"I have the honour, &c. &c. (Signed) G. LAKE."

Return of Killed, in the Assault of Bhurtpoor, on the 21st of February, 1805.

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Return of Wounded, and Missing, in the Assault of Bhurtpoor, on the 21st of February, 1805.

His Majesty's 65th Regiment, European Regiment, Total,	Artillery, His Majesty's 22nd Regiment, His Majesty's 65th Regiment, His Majesty's 75th Regiment, His Majesty's 76th Regiment, His Majesty's 76th Regiment, His Majesty's 86th Regiment, Ist Battalion 2nd Regiment, 2nd Battalion 15th Regiment, Pioneers, Bombay divi- 2nd Battalion 2nd Regiment, Sion. Flankers 1st Batt 3rd Reg. Missing. Total,	CORPS.
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Names of Officers, killed, wounded, and missing.

KILLED.

Artillery-Lieutenant George Gowing.

H. M.'s 76th Regiment—Captain H. Corfield, and Lieutenant C. Templeton.

2nd Battalion 15th Regiment-Lieutenant Hartley.

1st Grenadiers, (Bombay division), Ensign J. Lang.

Major of Brigade, Lieutenant Durant.

Artillery—Captain Pennington.

- H. M.'s 22nd Regiment-Lieutenant Wilson.
- H. M.'s 65th Regiment—Captains Simes, Warren, and Watkins; Lieutenants Hutchins, O'Brien, Hund, Clutterbuck, and Harvey.
- H. M.'s 75th Regiment—Captain S. Engel, and Lieutenant and Adjutant P. Mathewson.
- H. M.'s 76th Regiment—Captain E. Manton; Lieutenant F. M. Sinclair, and Quarter Master W. B. Hopkins.
- H. M.'s 86th Regiment—Captain Morton, and Lieutenant Baird.

European Regiment—Captain Ramsay; Lieutenant Hamilton, and Ensign Chance.

1st Battalion 2nd Regiment—Lieutenant Colonel J. Hamond; Major Hawkes, and Lieutenant Arbuthnot.

Bombay Division.

2nd Batt. 2nd Regiment-Lieutenant Thomas.

1st Batt. 3rd Regiment-Lieutenant Tory.

1st Batt. 9th Regiment—Lieutenant Colonel Taylor, and Lieutenant Garraway.

Observations.

By appealing to the feelings of the European troops, the General gained them to his purpose, and obtained

their support in once more attempting to reduce the place by open assault. All that human exertion and bravery could effect was done, but, as before, in vain. The enemy were as brave, and proved as resolute as the assaulting party; while rendered confident by past experience, they used their commanding advantages with success. The fourth assault failed as the others had done before it, and from the same cause, viz. "Precipitation;" which we cannot too often repeat, "serves not to hasten the fall of a place, although it often retards its capture, and is always sure to render the contest more bloody."

February 22nd.

No firing from the batteries, and little from the enemy.

Night between the 22nd and 23rd February.

About midnight all the ordnance was withdrawn from the batteries, and the troops from the trenches.

February 23rd.

A detachment, consisting of two Battalions of the 15th Regiment Native Infantry, and a party of irregular horse, were this day sent to Muttra for grain. The enemy burned the British batteries; the battering train with the English Army was declared unfit for service; the vents of the iron guns had become so large that a man's four fingers could be put into most of them, and in loading the piece, instead of being covered with the thumb, the vent was stopped by bags of sand; not one 18-pounder shot remained in store; very little powder, and few other stores. Provisions were also scarce. The parties in the batteries and trenches were discontinued.

Observations.

The siege was now raised, the batteries and trenches abandoned, and the enemy triumphantly set them on fire. Thus the second month of the siege closed.

February 24th.

The Army changed ground this morning, and was much harassed by the enemy's horse, who took every advantage of the absence of the principal part of the Cavalry, detached under General Smith on the 8th instant. The Army encamped $6\frac{1}{2}$ miles distant from and north-east of Bhurtpoor, covering in this position the road leading to the depôts at Agra, Muttra, and Deig.

February 25th.

Two Battalions, with the few Cavalry remaining in camp, were this day sent to reinforce the convoy, which had been detached from camp on the 23rd instant, now on its return from Muttra.

February 26th.

The Muttra convoy, consisting of 7,000 bullock loads of grain, joined the Army this day. Recommenced making fascines.

February 27th.

Making fascines.

February 28th.

Making fascines. An attempt was made this day to bouche some of the injured 19-pounders; but the fissures in the vents were so large, and branched out in so many directions near the cylinder or bore of the pieces, that

great doubt was entertained of the practicability of this measure being effected with the means existing in camp.*

March 1st.

Making fascines.

March 2nd.

Making fascines. Two Battalions and all the irreguler horse marched this day to Deig, to convoy grain, stores, and shot to the Army.

March 3rd.

Making fascines.

March 4th.

Making fascines. Two Battalions and two Regiments of Cavalry marched to reinforce the convoy from Deig.

March 5th.

Making fascines.

March 6th.

Making fascines. The convoy from Deig, with grain and shot, joined the Army this day.

March 7th.

Making fascines.

March 8th.

Making fascines.

Not one gun was, before the conclusion of the siege, rendered serviceable.—Compiler.

March 9th.

Making fascines. All the sick and wounded, (920), sent off to Muttra, escorted by two Regiments of Cavalry, four Battalions of Native Infantry, and all the irregular horse.

. March 10th.

Making fascines and gabions. Some vakeels of the Rajah, were this day received in camp, and a treaty proposed.

March 11th.

Making fascines.

March 12th.

Making fascines. The convoy which marched on the 9th, returned to camp from Muttra, and brought seven 18-pounders, iron, and one spare carriage.

March 13th.

Making fascines.

March 14th.

Making fascines. A foraging party sent out.

March 15th.

Making fascines. Colonel Don in command of two Regiments of Cavalry, and four Battalions of Sepoys, with the captured guns, marched for Agra. The garrison in Bhurtpoor about 9 o'clock last night took alarm, and fired from all their guns and matchlocks for about a quarter of an hour.

March 16th.

Making fascines. Colonel Don arrived at Agra.

March 17th.

Making fascines.

March 18th.

Making fascines.

March 19th.

Making fascines.

March 20th.

Making fascines.

March 21st.

Making fascines. Colonel Don's detachment returned from Agra with one 18-pounder, and a quantity of stores.

March 22nd.

Making fascines.

March 23rd.

Making fascines. The Cavalry detachment, which marched from camp on the 8th February last, under command of Major General Smith, joined the Army this day, having effected the expulsion of Meer Khan from the Company's Territories.

March 24th.

Making fascines.

March 25th.

Making fascines.

March 26th.

Making fascines.

March 27th.

Making fascines.

March 28th.

Making fascines. Two vakeels from the Rajah, came into camp.

Ol servations.

At this period, after having received supplies from the field magazines, there were only 8 serviceable battering guns in camp, a number totally inadequate to commence operations with any prospect of success.

March 29th.

Making fascines. The Commander in Chief marched at 3 A. M. with the Cavalry, Horse Artillery, and three Battalions of the reserve, viz. the 1st and 2nd Battalions of the 12th, and 2nd Battalion of the 21st Bengal Native Infantry, under Lieutenant Colonel Don, to surprise Holkar's camp, about 6 miles off, situated behind a small chain of hills, in rear of the site of our first encamping ground. The apprehension of being surprised had induced the enemy to encamp in several divisions, and the operations of the British troops were directed against three of his principal encampments.

The Commander in Chief with the Cavalry, took a circuitous route to the right, leaving the hills consider-

ably to the left; while Lieutenant Colonel Don with the Infantry, proceeded nearer to the hills by the direct road to the enemy's position. The Infantry marched off about a quarter of an hour before the Cavalry, and engaged the enemy rather too soon for the Cavalry.

The Infantry reached the enemy's camp before daylight; but the guns which accompanied this part of the force had, by their noise in travelling, given warning of their approach. The fighting men had consequently moved off; and the enemy, having all their baggage ready prepared for flight, protected by the low mud walls which marked the boundaries of the cultivated fields in which they were encamped, most of them escaped, so that very few were cut up. Their camp was set on fire. Two elephants, 100 horses, 50 camels, and some country carriages were taken.

	March 30th.
Making fascines.	
	March 31st.
Making fascines.	
•	April 1st.
Making fascines.	_

April 2nd.

Making fascines. The Commander in Chief again beat up Holkar's Quarters with the whole of the Cavalry, Horse Artillery, and the reserve of the Army, near Futtypoor Sickree. Holkar had assembled the greatest part of his troops and baggage in a position, about 10 miles from our camp, in that direction.

The detachment arrived in the neighbourhood of Hokar's camp before the dawn of day; but he had received intelligence of our approach, and had sent off a portion of his baggage.

The enemy were found posted round a high village, covered by cultivated fields and surrounded by enclosures. It was still dark, but the fires of the enemy enabled Lord Lake to make his disposition for the attack without waiting for daylight.

The Cavalry, formed in two lines, moved round to the right; whilst the reserve and Horse Artillery were ordered to the left of the village. The Cavalry advanced at a trot, and when within a short distance from the enemy, the right squadrons of each Regiment in the first line were ordered to charge, supported by the remaining squadrons and second line.

The enemy's Cavalry were drawn up ready to receive the attack; but on our moving down to them they ran off. We charged for some miles and killed about 400; the advanced parties of the Cavalry went as far as Futtypoor Sickree.

The fort of Bhurtpoor fired two shots at our troops as they were returning to camp.

On this occasion the troops made a complete circuit of the town; the only thing of the kind attempted during the siege. In the jungle in returning, the column fell in with some hundreds of the enemy's Infantry who were immediately charged by a squadron of H. M. 8th Light Dragoons; the greater part of them were cut to pieces, and the remainder threw down their arms, and were made prisoners. They proved to be a body of Meer Khan's Infantry, which having quitted that Chief, was proceeding to offer its services to Rungeet Sing. The

route lay latterly through a thick jungle of trees and underwood, and for 2 miles the columns skirted the town and citadel, about 800 or 900 yards off: the shot fired were chiefly from lofty cavaliers and the citadel, and went over at once or after a first graze; the high villages past by, afforded good views of the town and fort which appeared extensive, populous, and full of red-brick buildings. Returned to camp about 1 P. M. after a march of about 50 miles.

	April 3rd.
Making fascines.	
	April 4th.
Making fascines.	
	4 1

April 5th.

Making fascines. The reserve and one of the Bombay Battalions under Colonel Don, marched at 3 P. M. to reinforce a detachment expected from Rampoorah, under the command of Colonel Holmes.

	April 6th.	
Making fascines.		
•	April 7th.	
Making fascines.		

April 8th.

Making fascines. Marched back to our last ground to recommence operations. Encamped opposite Grant's post.

April 9th.

Making fascines.

April 10th.

The reserve which left camp on the 5th joined this evening, Colonel Holmes' detachment of two Battalions of Native Infantry. Preliminaries of a treaty signed.

April 11th.

The Rajah's third son, Prettee Sing, came into camp this evening as an hostage, bringing with him the keys of the fort, and a treaty was concluded.

Final Observations.

After a siege of 100 days, in the course of which the Army lost the services of more than 100 Officers and 3,000 men, being a greater number than had fallen in any three of our field engagements during the war, the Commander in Chief, unable "to effect the entire reduction and annexation of all the forts, territories, and possessions of the Rajah of Bhurtpoor" signed, on behalf of the British Government, a treaty of friendship and peace, guaranteeing to that Chief the uncontrouled possession of all his hereditary dominions; and the Supreme Government, deeming this treaty in every respect "honourable and advantageous to the British interests," ratified and confirmed it.

In concluding our observations on this siege, we only perform an act of justice in calling the attention of the reader to the laborious and fatiguing duties, which, from the paucity of troops, fell to the share of every branch of the Army.

The Cavalry Brigades and Horse Artillery troop, detached every third day on foraging parties, were often out of camp from daybreak till dark, and always called for on occasions of convoy and escort duty. They en-

dured great fatigue in the long pursuit of Meer Khan, and in the several attacks upon Holkar, besides doing much duty in protecting the camp.

The Infantry had to carry on the principal duties of the camp and trenches, with scarcely a relief from some daily duty; they had a share in all foraging parties and convoy escorts, and exclusively bore the brunt of the several assaults.

The Artillery and Pioneers remained, day after day, and might after night, constantly on duty; while the other branches of the Army had some occasional relief, and the Infantry in the trenches were relieved daily. The Artillery and Pioneers, from the extreme paucity of their number, both in Officers and men, were harassed far beyond their strength, and had much more than a fair share of exposure and fatigue.

The situation in which the whole of the troops was placed, was, finally, very trying; and it is not surprising that the spirit of some sank under it. It is indeed surprising that both the moral and physical strength of the soldiery were not entirely exhausted, under all the discouraging circumstances of the siege.

In contrasting the speedy reduction of Deig, with the repeated failures at Bhurtpoor, one is struck with the very opposite results attending a mode of attack which was identically the same on both occasions. An examination of the two journals will, however, shew that there was an essential difference in the nature of the points attacked; and to this difference may partly be traced the very contrary effects produced by a similar series of operations.

At Deig the absence of a ditch and glacis enabled distant batteries to make a practicable breach. At Bhurt-

poor the existence of a ditch at the point attacked induced the garrison to improve it; they widened and deepened it to secure the breach by inundation, and thereby rendered the distant batteries of no avail. At Deig, where there was no such obstacle, no measures were taken to defend the breach. In justice to the enemy, however, it must be remarked, that the Shaw Bourge at Deig, being at the end of a chain of little hills, and the ground rocky and rugged, it was difficult to work upon, and too high to be flooded.

Lieutenant Colonel Jones, in his accounts of the sieges in Spain remarks, that "whilst the communication of a fortress remains open, with an enemy in the field, to attack it, is to attack that army by a single front of fortification; for every man in his turn shares in the defence: and if the two Armies are any way on an equality in point of numbers, perseverance in such an attack must almost inevitably lead to the destruction of the assailants; for they cannot obtain success till they have put hors de combat, a number of men nearly equal to themselves, and it is not to be supposed that this can be effected without something of a similar return on the part of the defenders, who have all the advantage in strength and position." The siege of Bhurtpoor is a practical illustration of the truth of this observation. Jones also observes, that "the number of men required to carry on a siege with vigour, is founded on fixed principles, always remaining the same: varying however in certain contingencies, of which the Commander of the Army is alone capable of judging. He has first to decide what number of reliefs the troops will have, that is, the proportion of rest to duty; and also what number of his troops he thinks equal to cope with the garrison, and then the detail follows as a matter of course. The following," he says, "seems the minimum of calculation: Guards of the trenches, three-fourths of the strength of the garrison. This duty may be taken for a short service with three reliefs, the workmen, however, cannot do with less than four reliefs. Their number depends on the nature and trace of the works to be attacked: but calculating for the operations against a common front of 100 toises with a ravelin, then the length of the first parallel and one approach to it, which should be. opened the night of breaking ground, measures alone 3,800 yards, which, at 4 feet apart, requires at once in round numbers 3,000 men to line it, the number of the first night's working party. The second night the same number of workmen will be required, and what with the service of the Artillery, &c. but small deduction can be made from it till the completion of the second parallel. For the remainder of the siege much fewer will suffice; therefore by arrangements and a little extra fatigue for the first days of the siege, the working parties may be averaged at about one third less than the party of the first night, or 2,000 men."

"The proportion required for the regimental and camp duties, piquets, escorts, stores, provisions, &c. of the Army, will vary according to the hostility of the people in whose country the siege is carried on, and it is one of the contingencies to be regulated by the General commanding; but being fixed, their reliefs must be equally regular with the others. For the sake of calculation it shall be stated at one-tenth of the whole Army."

"On these data, the amount of an Army, required to form the siege of a place with 5,000 men in it would be:

The guard of the trenches, 3750 at 3 reliefs, Working parties, 2,000 at 4 reliefs,	11,250 8,000
Duties of the Army, one-tenth at 4 reliefs,	19,250 7,700
For sickness, casualities, &c	26,950
Making a total of	•
"From this calculation it is evident, ceteris that the more numerous the garrison, the sm besieging Army need be in proportion to it: for tack of a similar front or fronts of a fortification different if the place contains a garrison of 5 or men; the guards of the trenches and other duties proportionally, but not the work. The calculate attack of a garrison of 10,000 would be:—Guard of the trenches, 7,500 at three reliefs. Working parties, 2,000 at four reliefs,	aller the or the at- on is little r 10,000 s increase lation for 22,500 8,000 30,500
For duties of the Army, one-tenth at four reliefs	42,700
For sickness, casualties, &c.	
Making a total of	•

"The one being nearly in the proportion of 5 to 1, and the other 4 to 1: hence it is that the most celebrated and best Engineers are agreed as a principle, that the besieging army should vary in its proportion to the strength of the garrison according to its numbers, and have as an approximation fixed that proportion as 5 to 1,

when the garrison consists of 15,000 men; 6 to 1, when of 10,000 men; 7 to 1, when of 5,000; and 8 to 1, when of 3,000, and in a greater proportion when fewer.

"If there is any Cavalry in the place the guard of the trenches require to be supported by a number of Cavalry, equal to the total of that arm in the garrison, and one half more posted in reserve at the mouth of the trenches: for as it (the Cavalry) can only act on the flanks of the trenches, such flanks must be prepared to combat with all in the garrison, and which by such arrangement is the case, the half being in a situation to support either flank."

Now although the attack of Indian fortifications need not be controuled by the rules which regulate an Luropean siege, yet the same general principles are applicable to both. And if the quantum of Infantry and Cavalry for a siege cannot, from the want of a disposable force of that description of troops, be given in due proportion to the numbers of the enemy's garrison, it ought at least to be fixed with reference to the operations likely to be required in the course of attack; and if sufficient Infantry and Cavalry are not to be obtained, the deficiency ought, as far as possible, to be made up by an ample equipment in the Engineer and Artillery departments.

"No exertion of science, knowledge, or bravery," says Colonel Jones, "can be availing, unless seconded by powerful means in Artillery, stores, and materials; for there is nothing more certain, than that the reduction of a place must be paid either in materials or men, as they shall be made the chief sacrifice. Every saving," he adds, "in the former has the double disadvantage of an additional expenditure of time as well as of life; when

therefore the choice exists as to such expenditure, the selection cannot be a moment doubtful."

The siege of Bhurtpoor, where the time, the life, and the credit of the British Army was fruitlessly sacrificed. is not the only instance on this side of India in which a deficiency of siege material has occasioned failure and defeat. "We have seen," says an Officer of the Bengal Army, in a work published on the attack of mud forts, "a force of 2,500 sepoys sent to besiege a place 1,700 yards in circumference, defended by a garrison of upwards of 5,000 men; with this detachment a train of Artillery was sent, consisting of two brass and two iron 18-pounders. Such was the scarcity of military stores, that ammunition could not be spared to demolish the desences, lest enough should not remain to effect a breach; and so scanty was the supply of implements in the Engineer department, that they were not procurable for the working parties. There were not bamboos sufficient to make a second set of scaling ladders; the first set was lost in an unsuccessful assault, and before another could be made it was necessary to send for bamboos upwards of 100 miles. The want of Artillery and stores," he adds, "has been severely felt on many occasions, the consequences of which it is unnecessary to relate."

The details of the Bhurtpoor siege, will, it is hoped, evince that such deficiency is as contrary to economy as it is fatal to humanity, and serve to inculcate Jones's maxim, that "No policy at a siege can be worse than beginning operations with a small quantity of materials, and making the attack keep place with the supply."

In India, where success is the criterion of superiority, and where the tranquillity of our empire depends solely upon the high opinion entertained by the natives of our military prowess, our safety may be considered intimately connected with the result of every siege; no means therefore should be neglected—no efforts spared to ensure success in such operations.

Our discipline and tactics, the valour of our troops, and the gallantry of our Officers have rendered us superior in the field to the out-numbering force of Native armies. But whenever a Native state has deprived us of these advantages, and by taking to fortified strongholds has forced us into a war of sieges, we have often been unsuccessful: our resources being frequently as inferior in quality as they have generally been deficient in quantity.

Possessed in Bengal of an inland navigation, which ranging from one extremity of our possessions to the other, gives every facility to the speedy and cheap conveyance of stores, we ought never to be deficient in our siege equipments.

The improvidence of the Bengal Military authorities in leaving the Army without an adequate battering train at the commencement of the general war in 1803, in the course of which the attack of several important fortified places was contemplated, can neither be excused by the suddeness of the campaign, or by the time allowed for completing the frontier magazines.—Indeed when it is considered that the sieges of Deig and Bhurtpoor occurred more than 12 months after the breaking out of the war, it seems impossible to justify the deficiency then experienced.

The limited means in the Artillery and Engineer departments had no doubt a most important influence on the operations of these sieges; but the errors committed in directing those means had certainly a share in causing the failures which occurred.

The reader will observe, that Lord Lake, in a letter of the 1st July 1805, addressed to the Governor General, reviewing the proceedings of the siege, directly imputes to his Engineers "a want of ability, knowledge, and experience in sieges:" as if, says Mills, a "Commander in Chief is fit for his office, who is not himself an Engineer."

If the direction of operations had really been entrusted to the Engineers, the responsibility of the failures ought no doubt fairly to be attached to that department. But the foregoing journal has probably convinced the reader, that the conduct of the attack on Bhurtpoor, was not entrusted to any one particular department. We are led to believe that the Commandant of Artillery, might have exercised a very considerable influence over many of the operations of the siege, and should have been most happy to have shewn, that either that enlightened Officer, the Chief Engineer, or the General himself, was free from that blame, which attaches, ex officio, principally to the latter, although as gallant and zealous an Officer as ever served his country. It may however be questioned whether Lord Lake's qualifications for command, went very much beyond the possession of those military virtues. He certainly had the art of inspiring enthusiasm into his troops, by his readiness at all times to share their dangers and fatigues; but of professional science, he had, we believe, no great share. Unskilled in the lesser tacties of common military evolution, and holding in contempt that military knowledge which is founded on mathematical science, to endure fatigue and to fight his enemy whenever he could come up with him, without weighing his chance of success, seem to have constituted his principal notions of the art of war; and it is singular what success attended them. Fortunately

he had little more than barvery to cope with in his Indian antagonists. For when accident gave time to reveal the actual nakedness and impotence of his system, at this celebrated siege of an insignificant fortification, the spell was broke, and a lesson of successful resistance taught to the Natives of Hindoostan, which future years proved not to be forgotten.

N. B. The Compiler takes this opportunity to state that he will be happy to receive, through the Editor of the Repository, corrections of any errors which may have crept into the Journal of the Bhurtpoor Siege, or information on any facts omitted.

Five out of the eleven guns stated in page 85, as captured from the enemy by Captain Grant, were, the Compiler learns, taken by a party of Artillery-men, detached by Captain Pennington, then commanding in the batteries.

APPENDIX

SIEGE OF BHURTPOOR.

Letter from the Commander in Chief to His Excellency the Most Noble Marquese Wellesley, K. P. Governor General, &c. &c.

(Official and Secret, No. 161.)

My Lord.

Having for some time past had reason to believe that a correspondence inimical to the British interests existed between Rajah Runjeet Sing, the Rajah of Bhurtpoor, and Jeswunt Rao Holkar, I directed your Excellency's Agent, to inform Mr. Thomas Mercer, who is in charge of the Police of the city of Muttra, of my suspicions, and to desire that he would use the means which his vicinity to Bhurtpoor, and the superintendence of the Police of Muttra might afford him, to discover the channel of this correspondence.

- 2. Mr. Mercer accordingly, having beer informed by the people whom he had employed secretly for the purpose, that the accredited Vakeel from Jeswunt Rao Holkar to Rajah Runjeet Sing was then in the city, caused him to be apprehended, and his papers to be taken charge of and sealed, until he should receive any further orders.
- 3. The deposition of this person, by name Nurunjeen Loll, taken before Mr. Mercer on the 1st instant, states that he had been long employed as the channel of communication between Jeswunt Rao Holkar and the Rajah of Bhurtpoor, and several Zemindars in the Doab, and that the object of the correspondence carried on, was the entire subversion of the British power, and influence in Hindoostan.
- 4. I yesterday received from Lieutenant Colonel Monson at Rampoorah, with a letter dated the 1st instant, several original letters which he had on that day intercepted, addressed by Koer Rundhere Sing, the eldest son of Rajah Runjeet Sing, by others of his confidential servants, and by the abovement Nuranjeen Loll, to Jeswunt Rao Holkar and his confidential servants.

- 5. The contents of these letters very fully corroborate the deposition of Nurunjeen Loll, not only in regard to the object of the correspondence, but in respect to the mode in which it has been conducted, and from the impassibility of collision, afford conclusive proof of the treacherous conduct of the parties concerned.
- 6. Translations of the several papers relative to this subject are now enclosed for your Excellency's information, and copies of the original Persian papers will be transmitted to the Secretary to Government in the Persian department.
- 7. I have directed Mr. Thomas Mercer to send Nurunjeen Loll under a proper guard to the Fort of Agra, and to take the first safe opportunity of transmitting the papers taken in his possession to your Excellency's Agent.
- 8. Although these papers will probably, from the confidential terms in which Nurunjeen Loll appears to have been with the parties concerned, furnish many particulars in regard to the extent of this combination, yet as I deem the fact itself sufficiently established by the documents now laid before your Excellency, I lose no time in forwarding them, that I may be speedily favoured with your Lordship's sentiments and instructions in regard to the line of conduct to be hereafter observed towards Rajah Runject Sing.
- 9. From the meeting I had with Runjeet Sing in camp, and from common report, I am inclined to believe that his character is by no means of that daring stamp, as to induce him readily to pursue measures so fraught with danger as his present conduct would appear to indicate. His son Koer Rundhere Sing, who is also in my camp, is of a character equally indoent and devoid of ability. The people who possess their confidence, however, are characters of a description likely from the desperate state of their fortunes to advise the most violent measures. It has been a constant practice with the Bhurtpoor Rajah to afford refuge and countenance to persons of whatever character, who may have been expelled by the chiefs of the neighbouring countries. Jewan Khan, a principal person in the accompanying correspondence, was formerly a confidential servant of the Rao Rajah, and was dismissed by that chief for repeated acts of treachery and villany.
- 10. It may be proper here to remark that this treacherous correspondence appears to have been commenced soon after Rajah Runjeet Sing had entered into a treaty with the British government, by which

he was permanently released from the tribute formerly paid by him to the Mahrattas, and was carried on at a time when he was receiving the most undoubted proofs of the friendship and favour of the British government, by my having granted to him Sunnuds, subject to your Excellency's confirmation, for countries of the annual revenue of about four lacs of rupces, which were contiguous to his former possessions, and not included in the line proposed by your Lordship as the boundary of the British possessions.

- 11. Although the resources or power of Rajah Runjeet Sing cannot reasonably give any cause of alarm for the result, should it be deemed expedient to punish his treacherous conduct, yet under present circumstances it would not appear adviseable that the Army should advance to any considerable distance from the frontiers of the Dooah, without leaving a strong force, which might both counteract any design of Runjeet Sing against the Company's territories, and prevent his interrupting the supplies for the Army in advance, which must pass through his country.
- 12. I am at the same time aware of your Excellency's anxiety for a speedy termination of hostilities with Jeswunt Rao Holkar, and shall use every exertion in my power to effect that object, by the employment of as large a force as can be furnished for that purpose from this quarter, consistently with a due attention to the more immediate and important object of the safety and quiet of the British territories in Hindoostan.

I have the honour to be, &c. (Signed) G. LAKE.

Cawnpore, August 13, 1804.

Extract of a letter from Mr. T. Mercer, in charge of the Police at Muttra, to the Agent to the Governor General.

Immediately on the receipt of your letter of the 27th ultime, I set to work to endeavour to ascertain the truth of the suspicions entertained by His Excellency the Commander in Chief, respecting the conduct of our allies, and have been uncommonly successful in the attempt. I was last night informed by the people I employed, that the accredited Vakeel of Holkar, at the Bhurtpoor Durbar, was actually in the city of Muttra. I consequently seized him and all his papers, and now transmit you his declaration. The original letters, alluded to in

the enclosed, he says will be found amongst the papers in my possession; I have not thought it proper for me to examine these papers until I hear from you, as the business is of so much importance, as may induce his Excellency to send you or some other person up for this purpost. I here in my own mind had a doubt of the existence of a is treachery, which I hope may be sufficiently proved by the document in my possession, to warrant any measures Government may that, proper to pursue. I shall keep the whole of this business as secret as possible, and shall of course keep Nurunjeen Loll in confinement until further orders. I send this by two horsemen to Colonel Blan, with a request that he will forward it express.

(Signed) T. MERCEB.

Muttra, August 1, 1801. 4 P. M.

Declaration of Nurunjeen Loll taken at Muttra on the 1st August, 1804.

It is eight months ago since a letter arrived from the Rajah of Joudpoor, to my clder brother, Chunden Loll, at Muttra, desiring him to proceed to wait upon Holkar on his part. I was then at Bhurtpoor, and unemployed. Chunden Loll went from Muttra to go to Holkar's camp; and when he arrived at Bhurtpoor I met him, and he informed me of these circumstances, and that he was going to Holkar's camp. Chunden Loll afterwards was presented to Rajah Runjeet Sing, and told him that he was going to Holkar on the part of the Joudpoor Rajah. Runjeet Sing desired Chunden Loll to carry letters from him also, to Holkar. After he received the Rajah's letters for Holker, he carried me to the Rajah, and said, that as he was going to the Army he would leave me, Nurunjeen Loll, his younger brother, with the Rajah, to be the channel of the correspondence; and that he, Chunden Loll, would settle all the Rajah's business with Holkar properly. Chunden Loll then took his leave of the Rajah, and proceeded to Holkar's Army, and I remained at Bhurtpoor. Some time after Chunden Loll arrived in Holkar's Army, at Shapoora, and paid his respects to Holkar. He delivered Rajah Runjeet Sing's letter to Holkar, and received an answer which he sent to me. I delivered the letter to the Rajah, and received another for Holkar, which I forwarded. Chunden Loll wrote me that he had secured me one rupee a day from Holkar, and that money would be sent me for my expenses; accordingly every ten days a letter used to arrive from

Holkar to Runjeet Sing, and another to be sent from Runjeet Sing to Holkar, which were always sent through me. The subject of Rajah Runjeet Sing's letters from the first, to Holkar, was desiring him to come to this quarter, and take possession of the country, when he (Runjeet Sing) would join him; but that he (Runjeet Sing) expected to receive some Pergunnahs in Jagheer before he joined him, and that he (Holkar) should send him a treaty to this purport. Runiect Sing accordingly sent a list of the places he wanted; Chunden Loll got Holkar's seal affixed to this list, and a treaty made out under his seal, both of which he sent me. There were separate letters to Rajah Runjeet Sing, in which it was mentioned that the treaty would be delivered to him by me; I delivered the letter to the Rajah, and kept the treaty myself, at this time the intelligence arrived that Holkar had retreated; on this account the treaty remained with me, and Chunden Loll went away from Holkar to Joudpoor. Rajah Runjcet Sing, on hearing of this intelligence, immediately dropped the correspondence which had been carried on through us, and kept it up through another Vakeel, the son of a prophet of the Doora cast, who remained here on the part of Sultan Sing; Sultan Sing went to Holkar's Army before Chunden Loll did; but this they kept secret from ŭs.

When Holkar was encamped at Shahpoora, and after sending the treaty to Runjeet Sing, he sent a Sunnud for the Mahals in the Doab in my name, and wrote letters to Rajah Runjeet Sing, to Thakoor Dyoram of Hatrass, and to Bugwunt Sing of Sarsnee, to this purport: that he had sent the Sunnud for the Mahals in my name, and that they should consider me as the ostensible person from his Circar. and prepare their armies, and make a settlement of the Doab, and that I should remain with their armies as the ostensible person from him. I have still this Sunnud by me-I gave the Sunnud and the letters into the hand of Rajah Runjeet Sing. When he opened the letter and read it, he said, that if the Sunnud had been in the name of any Sirdar, the country might certainly have been properly settled. but that Holkar had sent the Sunnud in the name of a Mootsuddy, On saving this he broke out into laughter, and delivered back the Sunnad to me. I sent the letter for Dyoram enclosed in one from myself, by a hired hircarrah. Dyoram, in reply to my letter, wrote me that he had sent the answer to Holkar's letter by a pair of hircarrahs of his own: hircarrahs used constantly to go from Byoram to Holkar. I also sent the letter for Bugwunt Sing of Sarsnee, enclosed in a letter from myself; in answer to my letter he wrote that he had sent the reply to Holkar's letter, which he desired me to forward. The letter to me from Bugwunt Sing, under his seal, I now have. The letter for Jeswunt Rao Holkar I dispatched by a pair of hircarrahs of Bugwunt Sing. This is a fact.

Mahomed Eyar Khan came from Holkar, as Vakeel to Rajah Runjeet Sing at Bhurtpoor with letters, and remained there for some time. Matters were also conducted through him. Two months ago the Rajah gave him his leave. Chunden Loll, my brother, sent me a hoondee, which he had got from Holkar, for a hundred rupees. I did not receive the money for this hoondee; but Mahomed Eyar Khan realized it, and took it with him. Koer Rundhere Sing, the son of Rajah Runjeet Sing, keeps up, unknown to his father, a correspondence with Holkar. This I am perfectly well acquainted with.

Jewan Khan, who was formerly the Vakcel of the Rao Rajah, and now lives in Bhurtpoor, keeps up a correspondence with Holkar, and has a Vakeel at Muwatty with Holkar. He made mo write a recommendatory letter from him to Holkar; I have a copy of this letter. I have written a great many other letters to Holkar; but I have copies of no others of them, but of this. I used to go frequently to visit Jewan Khan. He one day told me, that Holkar had sent him a Sunnud for the Mahals of Mewat; I know nothing more on this subject. A month and a half ago I took my leave of Rajah Runjeet Sing, and arrived at Muttra. When I took my leave the Rajah gave me a pair of shawls, but gave not a pice as wages. I am very much in debt and distressed for money. Four or five days ago I received a letter from Gokul Ban, Rajah Runjeet Sing's Moonshee, by a hircarrah of the Rajah desiring me to come there, and that I should be either sent to Holkar or retained there, and employed in keeping up the correspondence. I wrote in answer that I came away, after having been eight months contracting debts, and had received nothing from the Circar, and that if money were sent for my expenses that I should come.

One month ago I sent an hircarrah to Moonshee Letchmain Sing,* in Holkar's camp, for money for my expenses; but I have as yet received no answer. Five or six days ago I heard that Sultan Sing, the Vakcel of Rajah Runjeet Sing, who had been formerly with Holkar, had now returned and had arrived at Bhurtpoor.

^{*} His Nephew.

Question. Do you know whether there is any Vakeel on the part of Holkar at Bhurtpoor, Delhi, Agra, or Cawnpoor?

Answer. I have declared every thing I know of the subject; but to the best of my knowledge there is no Vakeel from Holkar at any of these places.

Question. Where is your brother Chunden Loll now?

Answer. My brother Chunden Loll has gone to Wilait, (Cabul), where he has been sent by the Joudpoor Rajah. He is not with Holkar.

Signed by me, NURUNJEEN LOLL.

What is above written is my declaration and correct. Written 1st August, (Wednesday), 1804.

Examined before me.

(Signed) T. MERCER,

Superintending Police of Muttra.

1st August, 1804.

True Translation.

(Signed) G. MERCER,

Agent to the Governor General.

Translations of letters, &c. intercepted by Lieutenant Colonel Monson at Rampoora, on the 1st August, 1804. No date.

No. I.

Letter from Koer Rundhere Sing, eldest son of Kojah Runjeet Sing, to Jesucuni Rao Holkar.

After compliments. I have been much delighted and comforted by the receipt of your letter in answer to mine, in which you inform me of your welfare; evincing the steady and heartfelt friendship which you have long had for this family, and particularly for myself, your sincere friend, although at a distance and not personally acquainted, and mention that the bands of the wicked shall speedily meet their due punishment, as your conquering army will soon arrive in this quarter. Other proofs of your dignified friendship towards me I have also learned from Lalla Nurunjeen Loll. God preserve and prosper you for these instances of your friendship and remembrance.

I am prepared to act as your servant, and neither am now nor shall hereafter be in any way divided from you. I am most sufferely desirous of a meeting with you; and God grant that this wish of my heart may be effected. The delay in answering your letter has arisen entirely from the circumstance of the risk of the road on which letters are lost: otherwise how is it possible that I could allow such a delay in informing you of my affairs? You will have been informed of all these circumstances without my writing by the letters of Lalla Nurunjeen Loll. That I considered my own interest and welfare as entirely depending on the increase of your dignity and prosperity, your friendly heart will bear witness. Other circumstances tending to increase our friendship and union, will be transmitted to you by the abovementioned Lalla, whom I have sent for to my presence, and personally informed of them. Until a meeting can be effected, you will continue to favour me with an account of your welfare &:.

P.S. I have answered Lalla Nurunjeen Loll in the fullest, and most satisfactory manner on the subject which he mentioned to me. He will certainly represent the circumstance accordingly to you; you will certainly consider the report of the Lalla as faithful.

True Translation.

(Signed) G. M.

Agent to the Governor General.

No. II.

Letter from Jewan Khan and Mahommed Elah Buksh Khan* to Jeswunt Ruo Holkar. No date.

We offer to the presence of the Maharajah our services and respects; and we formerly sent through Lalla Nurunjeen Loll two urzees, texplaining the state of our matters here. We trust that from these urzees, and the urzees of Nurunjeen Loll, every circumstance will have been particularly known to you; we have not however been honoured with an answer to any one letter. We know not from whence this neglect of us arises. I (Jewan Khan) am now perfectly restored to health, and therefore represent to your presence that you should speedily honour me with your commands, in regard to waiting upon you, and send me a Sunnud for the Pergunnahs that I may agreeably to your commands, wait upon you, and employ myself in serving you;

^{*}Bfother of Jewan Khan.

t Vide declaration of Nurunjeen Loll.

I only wait for your commands, and no delay shall take place. Other circumstances regarding me you will learn from the urzee of Nurunjeen Loll. You will consider me as an old servant, and favour me accordingly.

True Translation.

(Signed) G. M.

Agent to the Governor General.

No. III.

Letter from Jewan Khan and Mahommed Elahee Buksh Khan to Moonshee Bahadur Sing, and Letchmun Sing. No date.

After Complements:

We formerly wrote you two or three letters through Nurunjeen Loll, containing the particulars of our affairs here; you will from these, and the letter of Nurunjeen Loll have learned all particulars. We have received no answer, which we are surprised at; you will inform us particularly of the cause of this delay, that the doubt of our minds may be expelled. I am now perfectly restored to health. and therefore write you that you should dispatch the commands of the presence, and an answer to this, with the Sunnuds of the places, by these hircarrahs, that I may speedily wait upon the Maharajah, and employ myself in serving him; I wait for the Rajah's commands. No delay shall take place here. We have had no intelligence from that quarter for a month and a half, and have in consequence been obliged to remain here. Immediately on the receipt of the orders, and the Sunnuds for the places, I shall proceed to the presence. You will also write me the other circumstances of that quarter, and the Maharajah's intentions. You will have learned the particulars of this quarter from Nurunjeen Loll. Write me constantly the news of your quarter &c.

(In a separate paper.)

A person has arrived here from Alwar and Rajghur, who reports that the Rao Rajah, in consequence of the English having crossed the Jumna, being much frightened has formed an intention of sending Ramoo Kawass, and Atahbad Khan, the elephant driver, to Holkar. I inform you of this, that if these people should arrive in camp before me, you will recollect that the whole of this disturbance has been

occasioned by him (the Rao Rajah); without his being concerned no such disturbance would have taken place; he is the sole origin of the troubles. You are well acquainted with what has formerly happened to me. Now that the time for retaliation approaches, your assistance will forward my objects. If these people should come, you will first demand from them an account of the property plundered from the Pergunnahs of Cotoombur, nearly ten lacs of rupees, and the collections made from the Pergunnahs of Moordain, Baltai, Ishonadpoor, Dadree, &c., and attach on this account what property they may have with them. From this a dread will come upon all these rascels, and the business of the Circar will be effected without trouble. What has happened to me has arisen entirely from my being a well-wisher of the Maharajah.

True Translation.

(Signed) G. M.

Agent to the Governor General.

No. IV.

Letter from Jewan Khan and Elah Buksh Khan to Seo Loll. Complements,

We have before wrote you three or four letters, but have received no answer; your letter from near Malpourah, we received, since which we have received none; this neglect is wrong. Lalla Nurunjeen Loll's five or six hircarrahs have been sent off, of which not one has returned; you wrote that permission for the Sunnuds had been given, and that a letter was ready, and that you would send them; they are not come. This distresses me much; my health is now restored, and whatever service the Maharajah orders I am ready to perform. I have sent an urzee to Maharajah, and a letter to the Moonshee; get the answer and the business firmly settled, then send me the answer. There is no delay on my part; as you write me, so I will do.

It is reported here that Maharajah encamped at Neuah, and Meer Khan has crossed the Jumna at Culpee, and is raising disturbances on the opposite side of the river. Write me fully the news from your quarter, and whate meant to be done. You have I suppose heard of the Feringees, viz. that they have not the power to do any thing;

(literally that which is called life they have no longer in them); they have here and there made every thing their own. If you do not seize this opportunity, when will you do it? Write me all the news from your part of what you and Maharajah settle.

The French have beat the English, and are arrived at Calcutta; write me the accounts of this; write me what are the negociations between Dowlut Rao Sandiah and the Feringecs. The Sirdars in the Dooab have wrote to me (Bugwunt Sing and Dyoram Sing) so I sent you their letters without delay; great and small are all ready, and only watching your steps; write me if you mean to arrange the affairs of the Dooab according to these letters, or not. On my part make my urzee to Maharajah, that he may lose no time now the Feringees have crossed the Jumna. If Maharajah comes and fixes his camp at Muttra, I will be able to settle all the country according to Maharajah's orders. Maharajah need not have the smallest uneasmess en any account: I will bring great and small to fall at his feet, and take the Mamulah according to his pleasure. Make an urzee of this in private, send me daily accounts of your marching and halting. We are alone in the hopes of Maharajah's arrival, and now when the Sunnuds of the Pergunnals arrive, and the number of men I am to recruit, they shall be got altogether; whatever business or orders the Circar shall give, I shall perform. Settle all these things firmly and be sure to send them-lose no time. I wrote to you before about the Sunnuds; you wrote that the Sunnads and letter had been ordered, and you would send them, so that I am waiting for them. I now write to you to be sure to send the Sunnud and the letter; as soon as they arrive I shall murch, and will certainly arrive in Maharajah's presence; so be sure to send them-lose no time. Write fully all news.

Dated Jeyt Seed 2nd, 1861, (18th June).

The latter part, and date in his own hand writing.

(Continuance of the same.)

Read another piece of news from Raje Ghur.—We have news that Ramoo Kawass and Baloo Sing's Rasallah (troop of horse) have been ordered to Holkar's camp: when they were seen getting ready, the news was brought to me; but they are not firm, and they are the people who have made this disturbance; on which account perhaps they cannot go: if they should go, do you be before hand in speaking to Maharajah, and telling him they are rascals—that they have raised this disturbance, and are now come as true men—that they are mas-

ters of five lacs, which he will take from them, and keep a watchful eye over them. This will produce great good, I have written this to the Moonshee, and now write it to you not to miss this. As soon as they come entangle them in this net, and then they will learn wisdom; in the beginning settle this business. They first caused Maharajah's in Hindoostan to revolt; to equal them there are no traitors in Maharajah's country; when you get them turned out of camp I shall be happy and be sure you send the Sunnuds. I am waiting for the Sunnuds; there is no delay on my part; explain this to the presence, and send them soon.

Dated Jeyt Seed 2nd, 1861, (18th June).

Latter part in his own hand writing.

A true copy.

(Signed) G. M.

Agent to the Governor General.

No. V.

From Lalla Nurunjeen Loll, addressed on the cover to Jewan Khan, in a different hand writing, but from the contents intended for some person in Holkar's camp.

Two months have passed since I have heard from you, or have had any accounts of your health, or that of my son. I am in much anxiety on this account, and the conflicts which have happened with the Army Six hircarrahs have been dispatched from hence; but not one of them has as yet returned. This, God grant, may arise from a good reason. At this time an hircarrah of my brother, Chunden Loll at Kygaula, has arrived here. I send the original papers which I have received, and from which you will understand the circumstances. If you are at Kotah, and my son is with the Army, you will dispatch an hircarrah to the Army, and write to me at Muttra.

The remainder illegible.

True translation.

(Signed) G. M.

Agent to the Governor General,

No. VI.

Letter from Chunden Loll to Jeswunt Rao Holkar.

After taking leave, I arrived in eight days at Joudpoor, and having written letters myself, dispatched them with the Khareila to Bickaneer. I wrote all the occurrences of the road, and expenses, to my son Letchmun Sing, and they will have been perused by you. Obedience and trouble is my province, and it is your's to reward.

Madeen al Mulk, Moaz ad Dowlah, and Shah Newaz Khan, before my arrival had sent an Abasse from Bhauripoor to Rajepoor, for the purpose of going to the presence. I shall soon be with him and accompany him to the presence. Shujah al Mulk is in Peishwar, and Shah Kyser in Candahar. The dissentions which prevailed in that country, have ceased under your auspices. I shall proceed to that court.

The tents of Bhaees, (Holkar's wives), are at Sutpoor, two coss from Joudpoor. Tantea Oligar and Rejah Ram, had been at court, and fixed upon a place for their encamement at Bhuluddeen; but there is no water there, nor is there any water on the road. On this account the residence of the Bhaees was fixed at Tewary, eight coss from Joudpoor, and they told the ministers of Joudpoor, they would not pay for wood or grass. Twenty thousand rupees per month was settled for the expenses of the Bhaees. Tantea demanded one lac of rupees. Kulliam Mull told him in reply that they should not have a handful in advance, but receive it monthly, so nothing was done. Maharaje Maun Sing sent the treaty by Chitter Bang to Lake, the Feringee, with five thousand rupees, to be divided among his people. Lake told the Rajah's Vakeel that it was improper in the Maharajah to harbour the family of Holkar, and inconsistent with friendship.

The Maharajah wrote in reply, that friendship had for a long time existed between him and Holkar, who has encamped on the borders of the Marwar (Joudpoor) country, while you remained at a great distance. On this account I received his family. Their honour and my own are the same. It is not proper your talking on the subject. To evince my friendship to the English, I would not permit my troops to join Holkar.

No infraction of the treaty between us shall be made. Such is the purport of the letter to General Lake.

True translation.

(Signed) G. M.

Agent to the Governor General.

No. VII.

Letter from Chunden Loll to his son Letchmun Sing.

All here is well, and I pray to God for your welfare. In eight days after I took leave of the Maharajah, I arrived at Joudpoor, and paid my respects to the Rajah, from whom I received letters and orders to the several places where they were required. I understood that for a hundred coss beyond Bickaneer, there is neither an inhabitant nor water. The travellers provide themselves with water at Bickaneer, sufficient to serve them to Bhawulpoor. The people with me were much alarmed, and you know how I am provided. I represented this to the Rajah, from whom I got a small tent and two more camels, and an order for fifty rupees; but this I did not immediately receive, but desired it to be given to my creditors here, and then departed for Bickaneer. There is a great scarcity of water. The three Syces ran away upon the road. The three horses which have been accustomed to tender treatment, are not able to go on. The rupees which I received from the presence were Boondee rapees, which passed on the road to Joudpoor at fourteen annas, and on this side at thirteen annas. There is a great scarcity of grain here: ten seers for a rupce. Four hundred rupces were given me for three months expense of the elephant. The daily expenditure for the elephant is as follows, ---- . The remainder of this letter relates merely to his expenses.

True translation.

(Signed) G. M.

Agent to the Governor General.

No. VIII.

Letter from Nurunjeen Loll to Jeswunt Rao Holkar.

Before this six hircarrahs carrying intelligence from this quarter, were sent off, but hitherto I have received no answer. What is the cause of this want of attention? I on a former occasion represented the disposition of the inhabitants of this country, and of Koer Rundhere Sing, son of Rajah Runjeet Sing. Rundhere Sing is now prepared to join you; he this day sent for me privately, and said with

^{*} Vide Letter from Koer Rundhere Sing, No. 1.

a sincere heart. I will join Holkar. I consider my own interests interwoven with the exaltation of Holkar; I am ready to join his victorious Army. By the blessing of God, when his triumphant troops arrive in this country, and we shall have a meeting. I can join him with near one hundred thousand horse and foot, and I will procure all the inhabitants, great and small in Hindoostan to join. Having sworn, he added. I henceforth am a companion of Holkar in all his toils and pleasures. He has also written to you. Safety to my Lord: Koer Rundhere Sing is enterprising and high minded, and detesting the continuance of the English in this quarter, und their killing cows, and scorns to yield obedience to them; he has therefore taken an oath to join you heart and hand, has bound his loins in his determination to extirpate them, and now expects your answer. But he fears your Army is still distant; that the veil of concealment will be torn, and the secret revealed. The idea is horrid, and the business would become difficult.

My Prince, when the enemy went towards Kotah to encounter your victorious Army, the disposition of the country greatly changed; but now when you design to come this way, and the enemy, overwhelmed by fear, are again creating disturbances in their own country, so weak are their measures, that they put to death the guards belonging to the zemindars.

You, who are a boundless river, adopt this arrangement, which will make the reprobates fly; send some chief by the way of Dhoulpoor or Kerowly and Subbleghur into the country, which will be of great advantage. Rajah Runjeet Sing also says, "Necessity compelled me to temporize with the English; but from my heart I wish to see you victorious, and by the blessing of God, I shall be prepared to join you on your arrival here. All, the great and the low, praise the wisdom with which God has endowed you, who have formed such a plan as will put all the Caffers (English) to flight."

I formerly wrote respecting the arrangements in the Dooab, and Bugwunt Sing* and others, but no answer has been returned. Now is the time.—Naher Sing Seikh, who quitted you and came here, is entertained by Runjeet Sing; he desires to be remembered.

Mahommed Yar Khan the Afgan, has been also entertained, and is sent to Rewarry. I formerly stated the situation of Jewan Khan; he is ready to go to you, if ordered, or to be employed in arranging matters here; he waits an answer: but five thousand horse will be wanted for this country.

Misser Byjoon, a son of Misser Eroomany Ram, son of Misser Lah Behary, who was astrologer to Maharajah Sooruj Mull and Jowaher Sing, and is unequalled in a knowledge of the stars, what he formerly foretold to you having happened, just now says you ought to advance immediately into Hindoostan, and enter Delhi in the month of Cattic. But it is necessary that you make some offering; if you order it, it shall be done at the festival, or he will join you and accompany the army.

I have sufficient influence to engage him in vous interest; but your leave is necessary, that his letters may arrive. I hope for a speedy answer.

The English have established guards, and made provision for the Brahmins at Dhujunter Ghaut; but the Misser and the Maharajahs Gossain say, if you will command it, they will work on the Brahmins to go away: but an order is necessary.

True translation, (Signed) G. M.

Agent to the Governor General.

No. IX.

Letter from Nurunjeen Loll, to Jeswunt Rao Holkar.

Previous to this, I wrate you respecting the affairs of this quarter, and of the requests, and further demands of Rajah Runjeet Sing, and sent a letter from the Rajah to your address: I am hopeful they have passed under your sun-like eye. Formerly when a pair of hircarrahs carrying intelligence from this quarter, and a letter from Chunden Loll, which had arrived from Joudpoor, and a letter from Koer Rundhare Sing Behadur, were dispatched to the presence, after a lapse of a month it was discovered they were stopped at Noahsheher: one of them, from the effects of huager, died in prison; and the other, by the exertions of Rajah Runjeet Sing, escaped and arrived with the letters, but all business was ruined. The letters of Chundien Loll and of Koer Rundhore Sing, shall again be sent.

Just now Rajah Runjeet Sing is ready to join you; and has told me that he was from necessity compelled to join the reprobate (English); for the enemy surrounded his country, and the Rajah of Jaypoor had also joined them, and your victorious army was at a great distance. But now, conformable to his oath, and by the worship of the cow, he has girt his loins with firmness. If just now your victorious army will approach, he is ready to sacrifice his life. But do not act as formerly, for the enemy tremble like reeds at your power and greatness. Your victorious army without fighting retreated, evading an action; if again the same should happen, what place will remain to us? If you have suspicions of us, bury them; for in this country, which is a most sanctified place of worship, and the residence of our god, how can we support the slaughter of Cows?

Safety to you. There is just now a misunderstanding between Runjeet Sing and the enemy, and their troops will certainly besiege Bhurtpoor and the other forts.

At the different forts horse and foot are entertaining, and stores of provisions are collecting for the garrisons. The English openly say, How long is Bhurtpoor to stand? It is a place of refuge, and a residence to the Mahrattas; and they say, Has not the dominion of the Mahrattas been removed from this country? It is not good therefore that Bhurtpoor should remain. Now the Rajah clearly understands that the establishment of the English power is deadly poison to him, and that the English will not leave to him his forts; he is, therefore, making preparations, and is desirous, if Holkar will come on just now, and be steadfast in his design, he will join him.

There are no troops of the enemy in this country just now, and the whole is bare of soldiers. If you put Lucar to death, and advance, you will conquer the whole country without a battle. I am united and confederate with the whole. But if, as before, you are not firm in this design, we are helpless and will temporize in the best way we can.

I am hopeful answers will be immediately sent to both letters, and also to those of Rajah Runjeet Sing and Koer Rundhere Sing.

True translation.

(Signed) G. M.
Agent to the Governor General.

No. X.

Letter from Nurunjeen Loll to his Nephew, Lelchman Sing.

(The commencement relates entirely to his distress from want of money.)

The son of Seat Runsah is ready to join Seatjee, and has taken his oath that he is ready to hazard his life in this junction, and that he will collect all the zemindars in Hindoostan, and whatever Army may be required. My son, this is a trust-worthy and brave man; his letter is also sent. You will by every means encourage Seatiee; but until this matter is ripe, let it be kept secret; after you have read the letter and explained it to Seatjee, tear it. He has made me swear that besides Moonsheejee and Seatjee no other person should be acquainted with this, otherwise much harm will ensue. A letter from my brother and an urzee has arrived which are sent to you, from them you will understand the particulars. Seat Rumsah also savs he is ready to join, and wishes from his heart victory to that side; but as the enemy is master, he is helpless. The letter of the sons of the Shah is upon plain paper, and without a bag. Do not consider this of consequence. It is not sent (the bag) on account of the dangers of the road; you will pay attention to my wants, for I am in much distress. I formerly wrote regarding the Perwunnas from Sewreh &c. but have heard nothing further on the subject. I learn from this hircarrah that my brother after having left Dhomun with the Rajah of that place, and having a horse for his riding, has departed for Cabul. God protect him and send him safe back. Change the address you have used for the Shah's son, agreeably to the accompanying Rookah,* which I have just received. He is a good man, and is, by the blessing of God, in no way estranged from you; you will dispatch the man who brings this immediately and not detain him. If you are desirous of news, he can bring it you constantly from Cawnpoor, or any other place where he may reside; otherwise give him 20 rupees and turn him off. Pay speedy attention to my wants.

True Translation.

(Signed) G. M.

Agent to the Governor General,

^{*}The Rookah not amongst the papers.

No. XI.

Letter from Nurunjeen Loll to his Nephew Letchmun Sing.

Before this hircarrahs, intrusted with intelligence from this, and a letter from Rajah Runjeet Sing, were dispatched; it is probable they have arrived; before that Munga and another hircarrah, with an address from my brother Chunden Loll, were sent to Holkar, and I looked for their return.

After a month it appeared that the hircarrahs were confined in the English Dawk-house at the ghaut: one of them died in prison, and Munga, by the good offices of Rajah Runjeet Sing, was brought here. All the papers were realtered; such as remained are sent to you.

Just now Rajah Runject Sing has sent a confidential person to me at Muttra, saying, if Holkar will come on just now it is better. I have written fully on all matters to the presence, which you will present. If Holkar will not advance now, when will be come? Rujah Ram and Nyn Sing, with letters and bills for 115 Bendraben rupees, have just arrived.

The knowledge of your welfare gave me infinite pleasure. I was relieved by receiving the bill from the hircarrah, without which I should have been greatly distressed. Your exertions and toils I learn from Rajah Ram; may you be safe. I swem by the head of Holkar, and by the power of my god, that although I left my house in distress, and have contracted debts, yet my hope is strong. If Holkar comes to this quarter, in a moment the labour of years will be wiped off.

I have not as yet received the amount of the bill, it is in the hands of Shroffs, to be paid in 14 days, on condition of my obtaining a receipt from Jeypoor. My own situation is as follows:—

Want of money* forced me to come from Bhurtpobr to Muttra. Day and night my ear is open to receive news of Holkar. It is necessary you study every word, and state to Holkar that such another opportunity will not again occur. After the rains the English will become steel; if Holkar advances now it will be better, and it is necessary, very necessary, that answers to the letters of Rajah Runjeet Sing and Koer Rundhere Sing be sent, and that you inform me if any hircarrahs have arrived from your brother: an answer to the letter of Messer Byjonat is also required.

Lalla Gerdary Loll sends his prayers for you.

Vide Declaration at Muttra.

Gerdary Loll of Muhabun, who was with Holkar, expects you will assist him. The letters from my brother came from Kotah, Lalla Teejrai is well in his own house. Khooshaly Buggest who went towards the camp from Munga, has come back, in consequence of the latter being confined.

True translation.
(Signed) G. M.

Agent to the Governor General.

No. XII.

Paper of intelligence supposed to be written by Nurunjeen Loll from the handwriting being the same as his letters.

The situation of affairs here is as follows:-- General Lake has cantoned at Cawnpoor. On the 27th of Jumenad oed awab, Lord Wellerleg arrived by dawl from Calcutta, and brought the traitor person with him. On the second day he sent for Meah Emaru Buksh, the Vakeel of Rajah Runject Sing, and said that he was willing to give up the new Pergunnahs, which General Lake had granted to the Rajah, but that it was necessary that the English Adamlut, (Court of Justice), should be introduced into all his country and forts, and that the Rajah should give up one mud fort to the Company for the purpose of depositing the Company's property, and that he should give up the Salt Makal of Combhere, for which, God willing, something else would be given in lieu. The above Vakeel answered that he would write to the Maharajah on the subject, and report his answer when received. Lord Wellesley then dispatched letters to the Rajahs of Jeypoor, Joudpoor, Kotah, Bondee, the Rao Rajah, and others, telling them to be firm in their attachment to the Company, and that he would arrive by the month of Cartick.

At this time there is great displeasure between Mr. Mercer, who is stationed at Muttra, in charge of the Salt business, and Rajah Runjeet Sing, and the former has said that in the month of Cartick, the Salt Mahal of Combhere would be taken possession of. Accordingly the Rajah has turned out under some pretence that gentleman's gomastahs from the different salt stations, and will not allow them to return. Mr. Mercer was much displeased at this, and scut for his people at the other stations, and demanded from them the money which they had received for the purchase of salt. The Rajah sent Roopram to Mr. Mefcer, to settle this business, who abused him, and said it was

the order of Government, that in the month of Cartick his forts should be taken from him, and that he told him this before hand, that he might see whether he spoke truth. During this time Meah Emaru Buksh Khan's urzee arrived on the subject of Lord Wellesley's arrival, and the order to introduce the English Adaulu. On these accounts the Rajuh has been much incensed, and is now entertaining horse and foot, and repairing the bastions and walls of the fort, and collecting stores of grain. The English will certainly quarrel with Rajah Runjeet Sing. Gomastahs have been dispatched to Jaypoor, to take possession of Sambhur, which, it is reported, the Rajah of Jaypoor has given to the English for five lacs of rupees. The English have given up the Jaidads of Bala Bhye, Hubeeb Shah, and Moonshee Kavel Nyn; and it is reported that the Army of Bapoojeo Scindeah has arrived at Malaree Khooseelgur.

The Army of the enemy stationed in Hindoostan is as follows: Harreen, with a buttalion of Sepoys and six small guns, and a regiment of Caralry, and all the buggage of the Army, is cantoned in Scindeah Pateel's cantonments. The cantonment is more than a coss in length, and a large bungalow has been erected, that it might appear from a distance to be a large Army.

Mr. Mercer has made a factory in Muttra on the part of the Company. Colonel Ochterlony is at Delhi, attending on the King with half a battalion, and Hafiz Ibrahim has been made Soobah of Delhi. At Delhi, Muttra, and other places; the practice of killing cattle is continued.

Particulars of the Army stationed in Hindoostan.

At Muttra, one battalion and one regiment of Cavalry, and six Guns. Agra, one Battalion.

Delhi, 500 Sepoys, and five hundred recruits.

In Hindoostan there is no other Army than the above.

If the conquering Army comes to this quarter, there is nobody but Lucan, who has the power of opposing it. Rajah Runjeet Sing is also ready to john. Bamboo Khan, Afghan, with two thousand horse and foot, is near Moghulpoora Delhi. He represents to the King that the person who committed the crime had been punished for it; that he himself had committed no crime, and hoped for a khilat and favour. This the King will not agree to. His Majesty is angry with Hafiz, who is at present master, on account of the slaying of cattle.

Rajah Runjeet Sing was besteging the fort of the Ahees in Rewarry. Now that he is displeased with the English he has raised the siege.

Begum Sumroo with her Battalions is as usual. Bowna Saharun, poor, and others also to be given to Semboo Ram Subsookroy.

Patnee Mull, the Dewan of Mr. Mercer, came from that enemy, and began to read the Payog, by an hundred Brahmins, and set down with them three Padrees. Goshaynjee asked Patnee Mull, as he was of the Hindoo religion, how he could do such a thing, which the devil himself would not do? He answered that he was helpless; otherwise how could he wish such a thing.

Rajah Runjeet Sing is employed night and day in entertaining horse and foot. If the conquering Army arrive now, all will be well.

To the Commander in Chief.

To His Excellency the Commander in Chief, &c. &c. &c.

Official.

Secret.

- 1. I have the honour to acknowledge the receipt of your Excellency's letter, noted in the margin, together with its enclosures.
- 2. I entirely approve your Excellency's proceedings as communicated to me in that letter, respecting the traitorous correspondence intercepted by Lieutenant Colonel Monson, and the examination and apprehension of the Agent of Jeswunt Rao Holkar, in the city of Muttra
- 3. The documents transmitted with your Excellency's dispatch, afford ample proof of the existence of a traitorous design to engage the power of Jeswunt Rao Holkar in the prosecution of purposes, inimical to the British interests in Hindoostan.
- 4. I am, however, disposed to believe that Rajah Runjeet Sing, Rajah of Bhurtpoor, and his son Koer Rundhere Sing, although deeply implicated in the existing design by their intercepted letters and communications, are rather to be considered as the instruments of their respective servants and adherents, than as principal contrivers of this nefarious project.
- 5. The project has probably originated among the desperate characters justly described in the 9th paragraph of your Excellency's letter; and it appears reasonable to presume, that the intrigues and machinations of those abandoned adventurers, have involved the Ra-

- jah of Bhurtpoor and his son in a design evidently contrary to their interests, and of which the success could not prove advantageous to any other class of persons, than the mean, profligate, and indigent contrivers of the original plot.
- and mercy of the British Government, require that a due indulgence should be manifested towards the imbecility, ignorance, and indolence of the Native Chiefs, who have been drawn into these acts of treachery and hostility by the depravity and artifices of their servants and adherents; on the other hand every principle of justice as well as of public security demands that an example should be made of the real authors of this design, and that due punishment of those guilty should operate as a restraint upon similar dispositions to commit acts of wickedness and audacity.
 - 7. I therefore hereby authorise and direct your Excellency to assure the Rajah of Bhurtpoor in the most distinct terms, of the determination of the British Government to discharge all the obligations of the existing treaty with him in the most struct and punctual manner, to apprise the Rajah of the falschood and wickedness of the imputations alleged against the British Government, respecting a supposed design of riolating that treaty, by any interference in the Rajah's internal Government, or by any attempt to subject his territories, forts or garrisons to the civil or criminal jurisdiction of the Company's Courts, or to interpose the authority of the Company in any manner whatever in his Civil or Military Government, or in any manner whatever to depart from the terms of the substitute treaty.
 - 8. Your Excellency will be pleased to make this communication to the Rajah of Bhurtpoor, either by letter, or by the direct mission of an accredited Agent, or by both modes of communication, according to your judgment and discretion.
 - 9. You will accompany this communication, by transmitting to the Rajah copies of any letters which may have fallen into your Excellency's hands from himself or from his son addressed to Jeswunt Rao Holkar; you will also signify to the Rajah your Excellency's knowledge of the conduct of his servants and adherents, and of the persons who have maintained an intercourse in his name with Jeswunt Rao Holkar; and you will admonish the Rajah respecting the inevitable ruin in which the practices of such persons must involve him if suffered to proceed with impunity. You will also require the Rajah and his family to relinquish all communication with Jeswunt Rao

Holker, and with every other enemy of the British Government; and you will signify to the Rajah that if he should continue such intercourse or correspondence, he will compel your Excellency to treat him as a public enemy.

- 10. Your Excellency will further inform the Rajah of Bhurtpoor of your determination to seize and bring to justice, all the agents concerned in any traitorous correspondence between the allies and dependants of the Company and its enemies, wherever such agents may be found; and you will apprise the Rajah that the indulgencies manifested towards himself and his son, will not extend to the inferior agents of the conspiracy, whom your Excellency will punish in the most signal and exemplary manner.
- 11. Your Excellency will be pleased to employ every degree of alacrity and exertion in apprehending all the agents and instruments of the existing conspiracy; and you will not scruple to scize any such person, although they should have taken refuge in the territories of our allies and dependants; especially you will use every endeavour to scize any such persons who may remain within the territories of the Rajah of Bhurtpoor, apprising the Rajah in the most distinct terms, of your determination not to sanction any asylum for criminals of such a description.
- 12. In pursuance of the spirit of this communication I hereby authorise and direct your Excellency to bring to trial before a Court Martial, all such persons concerned in the present conspiracy, as shall have been apprehended within the territories of our dependants and allies, or within the territories of the Company, not yet subject to the Code of regulations, and your Excellency will inflict upon such persons the punishment awarded by the sentence of such Court Martial.
- 13. Under this instruction your Excellency will bring to trial, and, upon conviction, to punishment, Nurunjeen Loll, apprehended in the city of Muttra, together with the other persons, whose correspondence appears in your dispatch, if they shall have been apprehended within the limits described in the preceding paragraph.
- 14. With regard to such persons, charged with the same crime, as shall be apprehended within the Company's provinces, subject to the regulations, your Excellency will be pleased to bring this description of criminals to trial before the Company's Court of Circuit and Appeal.

15. The effectual and early reduction of the power of Jeswunt Rao Holkar, will afford the only certain and permanent security against the consequences of this conspiracy, as well as against every similar design. I flatter myself that your Excellency will be enabled, by forming a detachment between Agra and Delhi_nco provide a sufficient restraint upon any internal disaffretion, or upon the conduct of the Rajah of Bhurtpoor, while the main body of your Army shall move with celetity against Jeswunt Rao Holkar.

I rely with implicit confidence upon the seasonable application of your Excellency's transcendent talents and activity, to this most urgent purpose, being firmly convinced that an early pressure upon the power of Jeswunt Rao Holkar from Hindoostan, will provide immediate safety for all our possessions, as well as for the general tranquillity of India. Any delay on the movement of the force destined to act immediately against Holkar, must tend to encourage that freebooter and his adherents, as well as every disaffected person within our dominions. I entertain no doubt that the first appearance of your Excellency's Army in the field, will dispel all these vain hopes and wicked artifices. Until an impression shall have been made upon Holkar's forces by the British arms, it is evident, that however contemptible, in fact, his power will obtain considerable reputation among the Native states; and the existence of such a reputation must tend to disturb the British territories, and to weaken the British influence and power in the northern provinces of Hindoostan.

> I have the honour to be, with the greatest respect, Sir.

> > Your Excellency's &c.

(Signed) WELLESLEY.

By His Excellency the Most Noble the Governor General.

(Signed) J. ARMSTRONG,

N. B. without date.

Military Secretary.

(Extract, Bengal Secret Consultations, 7th March, 1805.)

To His Excellency the Most Noble Marquess Wellesley, Governor General, &c. &c.

My Lord,

1. I have the honour to enclose for your Excellency's information translations of the correspondence which passed between me and Ra-

jah Runjeet Sing of Bhurtpoor, since the period of Jeswunt Rao Holkar's arrival in Hindoostan.

- 2. Your Excellency will observe, that the positive demand made by me, on my arrival at Agra, for the junction of Runject Sing's troops in conformity to the stipulations of the treaty, which demand had been delayed until the presence of my Army might enable him to have complied with it with safety to himself, has only been answered by an evasive reference to his Vakeel, who had remained behind at Agra, when I marched from that place to Muttra.
- 3. Moonshee Gunga Pursaud, the person mentioned in Rajah Runjeet Sing's letter, received on the 4th of October, arrived in my camp at Muttra, but confined himself to vague assurances of the Rajah's sincerity, and wishes to preserve the friendship of the British government. He was dispatched with a verbal answer to the same purport as my letter to the Rajah of that date, and under pretence of apprehension for the Cavalry of Holkar between Muttra and Bhurtpoor, crossed the Jumna at Muttra, with the avowed intention of going to Agra, and thence to Bhurtpoor; but in reality proceeded to Hattrass and Moorsaun, as it afterwards appeared from intercepted letters. He had been instructed, for the purpose of inciting the Jaut Chiefs, Rajah Dyoram of Hattrass, and Rajah Bugwunt Sing of Moorsaun, to use the utmost diligence in intercepting the supplies for the British Army.
- 4. During this period Holkar had been regularly supplied with provisions, and, it is confidently reported, with money from Bhurtpoor; and from the great additional advantage which the friendship of Runjeet Sing afforded him of throwing the whole of his bazars and baggage under the projection of Bhurtpoor, he was enabled to evade any decisive attack upon his Cavalry, whilst my anxiety to proceed to the relief of Delhi, prevented my following him to any considerable distance from my route.
- 5. The proofs of the hostile and treacherous conduct of Rajah Runjeet Sing, contained in the intercepted correspondence which I had formerly the honour of laying before your Excellency, between his family and servants and Jeswunt Rao Holkar, appear to be fully substantiated by subsequent events, which evince so decided a disregard of the stipulations of the advantageous treaty he had contracted with the British Government, and such marked ingratitude for the additional favour conferred upon him by giving him possession of countries to which he had no claim, that your Excellency will, no

doubt, consider it equally necessary strongly to mark the displeasure of Government for his past conduct, and to provide an adequate security for its interest against any further acts of treachery on his part.

- 6. The opinion of the country is unanimous, that Rajah Runjeet Sing's promises of support have been a principal inducement with Holkar to advance into this country—that the supplies he has been furnished with from Bhurtpoor have alone enabled him to maintain a footing in it till my arrival—and that the disturbances which existed in the Dooab, were principally excited and augmented by the evident countenance and support given by Runjeet Sing to the views and operations of the enemy.
- 7. As the advantages which Runjeet Sing has obtained by the treaty, and the favours subsequently bestowed on him, have hitherto proved equally insufficient to secure even a neutrality on his part, in a contest wherein his interests would naturally appear to ensure a cordial support to the British Government, it appears to me that no confident reliance can be hereafter placed upon his professions of friendship, nor any adequate security obtained for the safety of this frontier, nor the quiet of the upper part of the Dooab; whilst his possession of the forts of Bhurtpoor, Deig, Weir, and others, may enable him to give effectual assistance to an external enemy, and promote disaffection among the several Jaut chiefs in the Dooab, who are in a great measure guided by his influence, and who will consider an inattention on the part of the Government to his late conduct, as proceeding more from an apprehension of the strength of his forts, than from lenity.
- 8. The flight of Holkar's Brigades with his Artillery, will be a convincing proof to Rajah Runjeet Sing, of the fallacy of the hopes he may have entertained of Holkar's retaining any permanent footing in Hindoostan, and I may, consequently, expect his speedy return to professions of entire submission to the wishes of the British Government.
- 9. To such professions I shall answer, that as the treaty he had entered into with me had been ratified by your Excellency in Council, it would rest with your Excellency to determine how far his subsequent conduct had entitled him to the benefits of that treaty, or to be considered in the honourable light of an ally of the British Government; but that in the meantime I should consider it my duty to resume the grant which had been made to him, independent, of the

treaty, by the conditional Sunnud, (a translation of which is now enclosed), until I should be furnished with your Excellency's sentiments on the subject.

10. As it will be of importance that I should be speedily informed of your Excellency's final determination, in regard to the conduct to be observed to Rajah Runjeet Sing, I hope the subject will meet your Excellency's early attention.

I have the honour to be,

&c. &c.

Head Quarters, Camp, Delhi, October 21st, 1801.

(Signed) G. LAKE.

To His Excellency the Most Noble Marquess Wellestey K. P. Governor General, &c. &c. &c.

My Lord,

I have the honour to transmit for your Lordship's information, the accompanying copy of a letter from the Honourable Lieutenant Colonel Monson.

The decided part the Bhurtpoor Rajah has taken against the British Government in defiance of the treaty he entered into, leaves it no longer possible to attempt to preserve a pacific line of conduct towards that chief. I shall therefore commence operations against Deig, at the earliest practicable period.

I have the honour to be, &c. &c.

(Signed) G. LAKE.

Head Quarters, Camp, Bewar, November 21st, 1804.

To His Excellency General Lake, Commander in Chief, &c. &c. My Lord.

I omitted in my public dispatch of the 14th instant to inform your Excellency, that in the action of the 13th instant, with the Army of Jeswunt Rao Holkar, the fort of Deig during the engagement opened a heavy and destructive fire on our columns as they advanced upon the enemy, and that the Rajah of Bhurtpoor had also in the action of that day, one thousand horse and three battalions of Infantry with their guns. The Commander of this force (Sen Sing) was wounded in the leg with a cannon shot. They continue to fire from the fort

on our advanced posts and camp, but, I have the satisfaction to add. with little or no effect.

I have the honour to be. &c.

Camp before Deig, 18th November, 1864.

(Signed), W. MONSON,
Brigadier.

To Lieutenant Colonel Lake, &c. &c.

SIR.

I am directed by His Excellency the Most Noble the Governor General, to request that you will inform His Excellency the Com mander in Chief, that the Governor General has taken into his deliberate consideration the subject of His Excellency's dispatch, (No. 184) dited 21st October, on the subject of the Rajah of Bhurtpoor; and it is His Excellency the Governor General's intention to transmit a detailed reply to that dispatch in the course of a few days. With a view, however, to apprise the Commander in Chief of the Governor General's sentiments on the question submitted to His Excellency's consideration, in the dispatch abovementioned, with the utmost practicable expedition, I am instructed to transmit to you, for the purpose of being submitted to the Commander in Chief, the enclosed paper of notes, containing the substance of the Governor General's proposed reply to that dispatch, and to request that you will communicate to the Commander in Chief the Governor General's desire, that His Excellency will be pleased to regulate his proceedings with respect to the Rajah of Bhurtpoor, by the sentiments stated in the enclosed documents.

I have the honour to be, &c. &c.

(Signed) N. B. EDMONSTONE,

Fort William, 13th October, 1804. 5 Secretary to Government.

Notes of the proposed reply to His Excellency the Communder in Chief's dispatch of the 21st October, on the subject of the conduct of the Rajah of Bhurtpoor.

1. Whether the acts described by the Commander in Chief be the acts of the Rajah of Bhurtpoor, or of his advisers against the Rajah's inclination, they must be considered as the acts of his Government, and that question need not affect the proceedings of the British power with regard to that principality.

- 2. The facts stated by the Commander in Chief, afford the strongest presumptive evidence of the hostility of the state of Bhurtpoor, and are unquestionably of a nature to absolve us from the obligation of our engagements to the Rajah.
- 3. The local situation of the Commander in Chief places withinhis reach, means of judging of the views and intentions of the state of Bhurtpoor, with more certainty and confidence than the Governor General can possibly possess. His Excellency accordingly deems it proper to rely entirely upon the judgment of the Commander in Chief for the decision of that question.
- 4. If the Commander in Chief should be satisfied that the state of Bhurtpoor is connected with Holkar, his proceedings with respect to Bhurtpoor must be regulated principally by considerations of a Military nature, applied to actual occurrences.
- 5. If the Commander in Chief should succeed in destroying the power of Holkar, without being under the necessity of pursuing Holkar in such a direction, and to such a distance as would place Bhurtpoor between the Commander in Chief's Army and the British territories, and if his Excellency should thus be left at liberty to employ a sufficient force for the reduction of Bhurtpoor, the prosecution of that enterprise will then become a question of a political as well as of a military nature.
- 6. If however, in the event stated in paragraph 5, the Commander in Chief should consider the reduction of the Rajah of Bhurtpoor's tourcesses to be absolutely necessary for the permanent security of our possessions, that consideration being paramount to all others, ought to influence the decision of the question.
- 7. If considerations of security should not require the punishment of Bhurtpoor, those of policy suggest the expediency of forbearance, notwithstanding the provocation which would render such punishment an act of retributive justice.
- 8. If the Commander in Chief should be under the necessity of pursuing Holkar in such a direction, and to such a distance as would place Bhurtpoor between his Army and the British possessions, it will remain for the Commander in Chief to decide:

First—Whether it would be safe to leave the state of Bhurtpoor in the command of all its strength and resources in the rear of our Army.

Secondly—If it be considered dangerous to leave the state of Bhurtpoor unmolested, while our Army should be in pursuit of Holkar in the manner above stated, whether it is practicable to prosecute the double operation of reducing the Rajah of Bhurtpoor's forts, and of pursuing Holkar with a superior force at the same time; or, if this be impracticable, whether a British force, syfliciently strong to keep the Rajah of Bhurtpoor in check, although not of sufficient extent to undertake the reduction of the forts, could be left in a position proper for that purpose without retarding or impairing the efficiency of our operations against Holkar.

Thirdly—If both those plans be deemed impracticable, whether the British interests would be exposed to the greater hazard, by suspending the pursuit of Holkar until the reduction of the power of Bhurtpoor, or by leaving that state in all its actual strength, in the rear of our Army.

- 9. These are questions which the Commander in Chief is most competent to decide, and it is the wish of the Governor General that the Commander in Chief should act according to the dictates of his judgment, upon the various cases thus submitted to his consideration.
- 10. The question of the resumption of the grant of lands, which the Rajah of Bhurtpoor received from the Commander in Chief, must be decided with reference to the following considerations:

First—Whether its resumption would involve or precipitate hostilitics with the State of Bhurtpoor; in which event, that question is involved in the consideration of the questions above stated.

Secondly—If it should not involve or precipitate hostilities, whether the possession of the lands specified in the grant, affords to the state of Bhurtpoor any advantage in the prosecution of plans of treachery, by their position, by the places of strength which they contain, or by their revenue. If they do afford such advantage, the expediency of their resumption must be considered in a degree, with reference to the means which we possess of excluding the authority of the Rajah of Bhurtpoor from those lands and depriving him of those advantages, and of maintaining our own authority in those lands.

11. The Governor General reposes entire confidence in the judgment, ability, and military skill of the Commander in Chief; and is therefore desirous of leaving in perfect freedom, the application of those distinguished qualities to the actual situation of affairs, and to this question among others for the promotion of the public service.

(Signed) N. B. EDMCNSTONE,

Fort William,
November 13th, 1804.

To N. B. Edmonstone Esq. Secretary to Government &c.

SIR,

I have the honour, by direction of His Excellency the Commander in Chief, to acknowledge the receipt of your dispatch of the 15th instant by express last night, covering a paper of notes containing the substance of the Governor General's proposed reply to the Commander in Chief's dispatch, (No. 184) dated the 21st October, on the subject of the conduct of the Rajah of Bhurtpoor.

I am instructed by His Excellency the Commander in Chief, to request you will assure His Excellency the Most Noble the Governor General, that his proceedings with respect to the Rajah of Bhurtpoor, will be regulated by the sentiments stated in the documents above alluded to.

It is the intention of His Excellency the Commander in Chief, at an early period, again to address his Lordship on this subject.

I have the honour to be, &c.

(Signed) G. A. F LAKE, Military Secretary.

Head Quarters Camp, Jewar, 27th November, 1804.

To His Excellency the Commander in Chief, &c.

(Secret and Official.)

SIR,

- 1. Having received the whole of your Excellency's correspondence respecting the recent conduct of the Rajah of Bhurtpoor, and adverting to the aid afforded by that chieftain to the troops of Jeswunt Rao Holkar, at the battle of Deig on the 13th November, and on various occasions since that period of time, I am decidedly of opinion that the Rajah of Bhurtpoor las not only violated the treaty concluded with him by your Excellency on the 9th October 1803, but has committed the most unprovoked and violent acts of hostility against the British Government.
- 2. I entirely approve the measures which your Excellency has already pursued for the purpose of frustrating the effects of the Rajah's treachery and hostility, and for the reduction of the fortress of Deig. The entire reduction of the power and resources of the Rajah of Bhurtpoor, however, has now become indispensably necessary, and I accordingly authorise, and direct your Excellency to adopt, immediate arrangements for the attainment of that desirable object,

and for the annexation to the British power, in such manner as your Excellency may deem most consistent with the public interests, of all the forts, teritories, and possessions belonging to the Rajuh of Bhurtpoor.

- 8. In carrying these instructions into execution, your Excellency will be pleased to advert to the train of my notes of the 13th November 1804, transmitted in a letter under date 13th November from the Secretary to Government in the Secret Political Department; the measures to be pursued against the Rajah of Bhurtpoor must be considered to be subordinate to the main object of destroying the resources and power of Jeswunt Rao Holkar. That chieffain, however, now derives his principal if not his sole means of mischief, from the aid of the Rajah of Bhurtpoor; and the subjugation of the power and territory of the Rajah of Bhurtpoor, therefore, is essential to the reduction of Holkar's hostile force.
- 4. Your Excellency will still be pleased to consider the pursuit of Holkar's personal Army to be the principal object of the war; and adverting to the general tenour of my former instructions, you will constantly bear in mind my opinion, that the entire destruction of whatever force may be attached to the person of this freebdoter, is indispensably required for the tranquility of India, and that even the arrest of his person is highly desirable.
- 5. You will therefore prosecute hostilities against the Rajah of Bhurtpoor, with reference to the object stated in the preceding paragraphs. Whatever portion of the territory of Bhurtpoor may be conquered, I request your Excellency to establish a civil authority in it without delay, for the temporary administration of the revenues, and of civil and criminal justice.
- 6. As your Excellency's proceedings against the Rajah of Bhurtpoor are calculated to serve as an example to other petty states, I desire that your Excellency will be pleased to forward circular letters to our Selties on the N. W. frontier, and to the several Rajpoot states, including Kotah &c., and also to Begum Sumroo, and the Sikh chieftains, explaining the principles of your Excellency's conduct towards the Rajah of Bhurtpoor, and assuring the allies and neighbouring states of the continuance of our friendship for them, and of our wish to preserve the peace, and to respect the independence of all the contiguous states of India. It might also be useful to circulate a declaration of a similar tendency, warning all presons against the consequences of affording aid to our enemies, and assur-

ing the inhabitants and chiefs of the surrounding countries, of our amicable disposition towards all who shall not favour the cause of the enemy.

- 7. I shall forward to your Excellency letters, and a declaration in my name to the effect; but in the mean while I request your Excellency to lose no time in addressing the several states in your own name.
- 8. Bapoojee Scindia with his troops has openly joined Jeswunt Rao Holkar. Your Excellency is apprised that this person is not only an officer of Dowlut Rao Scindia's Government, (who was sent to cooperate with your Excellency in the attack of Jeswunt Rao Holkar, under the stipulations of the defensive alliance concluded with Dowlut Rao Scindia), but is actually one of those chieftains included in the list of persons who receive pensions and jagheers from the British Government, under the 7th article of the treaty of Surjeanjengaum. Under these circumstances Bapoojee Scindia cannot be considered to be entitled to any of the rights of war, and it is my intention to proceed against him accordingly.
- 9. Your Excellency will therefore be pleased to issue a proclamation, ordering Bapoojee Scindia and his followers to proceed to your Excellency's camp, on a certain day to be named by your Excellency, under the penalty in case of failure, of being considered and treated as rebels and traitors to the cause of the allies, and to the British Government from which he receives a pension. If Bapoojee Scindia should not join your Excellency's camp on the prescribed day, and should afterwards become a prisoner to the British Army, your Excellency will be pleased to try him by a Court Martial, and to carry into immediate execution the punishment which may be awarded to him for his flagrant treachery and rebellion. Your Excellency will pursue similar measures against any of the followers of Bapoojee Scindia who may fall into your hands, notifying your Excellency's intention in the proclamation to be published under the instructions contained in this dispatch.
- 10. Your Excellency will also be pleased to take similar steps with regard to Suddasheo Bhow and his followers, who being ordered by Scindia to join Lieutenant Colonel Monson, have also joined the enemy.

I have the honour to be, &c.

Fort William, 20th December, 1804.

(Signed) WELLESLEY.

To N. B. Edmonstone, Esq. Secretary to Government, &c.

SIR.

- 1. I have the honour to transmit to you, for the information of His Excellency the Most Noble the Governor General/copies and translations of two letters from Jeswunt Rao Holkar, to Lalla Nurunjeen Loll, his agent at Bhurtpoor, and to the Bhurtpoor Rajah, which were intercepted by Mr. T. Mercer, in charge of the police at Muttra.
- 2. The letter to the Rajah of Bhurtpoor was forwarded to me unopened, and covered with his kareeta under the large and small seal of Holkar. The Purwannah to Nurunjeen Loll under Holkar's large seal, had been opened by Mr. Mercer for the purpose of ascertaining whether it contained any information, on which it might be necessary for him to act without waiting for the orders of His Excellency the Commander in Chief.

I have the honour to be, &c.

(Signed) G. MERCER,

Agent to the Governor General.

Cawnpore, ? 21st August, 1804.

TRANSLATION.

From Jeswunt Rao Holkar to Lalla Nurunjeen Loll, duted 12th of Rubbee ool Akher; 20th of July, 1804.

Your urzee with the letter from Bishoo Juder Behadur, (Rajah Runjeet Sing), has been received, and their contents understood. I send an answer to the Rajah's letter, which you will deliver to him secretly, and inform him personally of all the particulars of the battle and defeat of the enemy, the taking of Lucan, the European, and the Nawaub Fyze Tullub Khan, of Bharistch, prisoners, and the son of Rajah Heera Sing of Bullumghur, and others, being killed on the field of battle, (all which circumstances you will learn from the writing of Moonshee Letchmun Sing), and getting the Rajah to be prepared to act in my service, you will represent to me what his intentions and inclinations are. You will also give these orders to the Rajah from me, that if any battalion or regiment of Cavalry, or any individual European who may have fled from the battle should come to that quarter, he will make every enquiry after them by his hircarrahs and others, and take them prisoners alive, and not allow them

to go off. If by chance any brigade should come to that quarter from any other, and Rajah Bishoo Juder should not have the power to oppose it, he will stop its supplies according to the custom of zemindars, and confine their means of livelihood. Let him be steady to the agreement, that the children of the wearers of turbans, should be faithful to the wearers of turbans, and the sons of Europeans to the Europeans.

You will consider me as attentive to your welfare, and continue to send me your urzees. I have given twelve Rupees to Penraje Cossid.

Be satisfied.

True Translation.

(Signed) G. MERCER,

Agent to the Governor General.

TRANSLATION.

Letter from Jeswunt Rao Holkar to Rajah Runjeet Sing, Bishoo Juder Behadur, dated on the cover the 16th of Rubbee ool Akher, or 24th July, 1804.

I have received your letter, and have been gratified by it, and have understood all particulars from the urzee of Nurunjeen Loll. As I sent this person to you on account of our ancient friendship, I have now written to him that he should always remain with you, and give me the accounts of your health, and conduct our mutual consultations at this time, when the wicked Caffers have been punished by my victorious troops who are obedient to my commands, and have gained a great victory. Although you may have heard these circumstances from report, still I have written the particulars and others to Lalla Nurunjeen Loll, who will inform you of them privately. My dignified standards will be speedily directed to that quarter, to punish the rebellious reprobates, and to settle Hindoostan. It is the duty of friendship that you should, agreeably to ancient usage, exert yourself heartily in the service of the Circar, and pay every attention to the above mentioned Vakeel. Considering me in every situation your friend, continue to write me constantly.

True Translation.

(Signed) G. MERCER,

Agent to the Governor General.

- Extract of letter No. III, from the Commander in Chief, the Right Honorable Lord Lake, to the Governor General, Marquess Wellesley, dated Muttra, July 1st, 1805.
- 1. Your Lordship will recollect, that at an early period of the last war, when the success of our operations had exyended our dominion beyond the river Jumna, the Rajah of Bhurtpoor was the first of the neighbouring chiefs who manifested a desire to connect his interests with those of the British Government, and that in consequence of the overtures which he made to me, and in compliance with the instructions with which I had been furnished by your Lordship in Council, I concluded a treaty of alliance with the Bhurtpoor state, highly advantageous to its importance, to its interests, and to its security.
- 2. In consequence of this treaty, the Rajah of Bhurtpoor was exonerated from the heavy tribute he had annually been compelled to pay to the Mahratta states, and his future security and independence made to rest on the solid foundation of British power. An enlargement of territory, and an increase of wealth, likewise sprung out of this alliance, and constituted the rewards of the early attachment he had manifested to the cause of the British Government.
- 3. Large tracts of country adjoining to the territories of Bhurtpoor were, in the course of the war, conquered from Dowlut Rao
 Scindeah. The cession of these to the Rajah, of an extent and value
 equal to one third part of his ancient possessions, was the gratuitous
 act of the British Government. The obligations of gratitude were,
 therefore, added to those of interest and faith to give permanence to
 the alliance into which the Rajah of Bhurtpoor had entered.
- 4. A consideration of the important benefits and advantages which thus accrued to the Rajah of Bburtpoor, repdered the detection of a correspondence between that chief and our enemies, at an early period of the present war, a subject of no small astonishment. The surprise excited on this occasion was not diminished when it war found, that correspondence had no less an object than the subversion of the British power, by uniting their own strength and resources, and by engaging in their cause all the neighbouring chiefs and states over whom they exercised any influence or authority.
- 5. Copies of the letters intercepted between the Rajah of Bhurtpoor and Jeswunt Rao Holkar, were forwarded for the consideration
 of your Lordship in Council, in the month of July, 1804, and in consequence of these, I was furnished with such instructions as appeared
 to your Lordship, at the time, proper to guide my conduct in regard to
 the Bhurtpoor State.

- 6. These instructions evinced a spirit of the utmost moderation, and a sincere desire to preserve the alliance which had been established with the Rajah of Bhurtpoor. I was directed to make known to the Rajah the discoveries which had been made, to apprize him of the inevitable consequences of his perseverance in such measures, and to effect a removal from his presence and councils, of those advisers who had led to a conduct so inconsistent with his engagements, and so fraught with evils that must eventually involve his run.
- 7. The invasion of our territories soon after this period, by Jeswunt Rao Holkar's Army, induced me to delay discussions of such delicacy, until he had opposed effectual resistance to the progress of that chief. On my arrival at Agra in September, 1804, I accordingly continued to observe the most pacific dispositions towards the Rajah of Bhurtpoor, notwithstanding its being notorious that he afforded every possible aid and assistance to our enemics, and that he was active in his endeavours to excite to insurrection and rebellion, several chiefs in our own provinces who were connected with his family.
- 8. I judged it expedient at this time to require, that the military force the Rajah was bound by his treaty of alliance to furnish to the British Covernment, during the existence of hostilities, should be sent to join my Army. A compliance with this was at first evaded on the most unsatisfactory pretences, and he afterwards made no reply to my communications containing a repetition of the demand.
- 9. Affairs were in this situation in regard to the Rajah of Bhurtpoor, when I left Delhi, to proceed in pursuit of Jeswunt Rao Holkar's Cavalry in the Dooab, in the end of October. I therefore found it necessary to leave instructions with Major General Fraser, whom I placed in command of the Army destined to act to the westward of the Jumna, for the guidance of his conduct under such circumstances. I accordingly directed that Officer to refrain if possible from engaging in hostilities with the Bhurtpoor state; I ordered him however to repel aggression on the part of that state, with the utmost vigour and decision.
- 10. Though the Rajah of Bhurtpoor afforded secret assistance and support to the enemy, it still remained uncertain whether he intended to engage openly in the war: all uncertainty however vanished at the battle of Deig, on the 13th of November, and he commenced hostilities with treachery, perhaps not surpassed in the history of nations.

- 11. It has formerly been mentioned that the British Army had advanced on the glacis of the Fort of Deig, in pursuit of the enemy, whom it had driven under its walls; when in this situation, a destructive fire of cannon and musketry was opened on it by the garrison, which consisted entirely of the troops of Bhugpoor. This had the effect not only of preventing the total destruction of the enemy, but enabled them to convey off the field many pieces of their Artillery, which must otherwise have fallen into our possession.
- 12. From this period Jeswunt Rao Holkar, and the Rajah of Bhurtpoor were openly and avowedly confederates in the war; and your Lordship in Council directed me to prosecute such a plan of operations as would accomplish the reduction of the power of both these chieftains.
- 13. The Army at Ougein, under the command of Colonel Murray, was ordered to advance from the southward, in the direction of Kotah, and to cut off the flight of Holkar to Malwah, should be attempt to proceed in that direction. The Army under my immediate command advanced from Muttra towards the fort of Deig, where the whole force of the confederated chieftains was collected.
- 14. A considerable part of the enemy's force had thrown themselves into the town and fort of Deig, the remainder had taken up a position and intrenched themselves under its walls. Thus situated, the only effectual operation that could be undertaken against them, appeared to me to be the reduction of that place, and I accordingly made such arrangements as were necessary for besieging it.
- 15. An escort which I had sent to Agra, for the purpose of bringing up my battering train and necessary stores, joined me on the 10th of December; on the 12th of that month I took up my position before the fort, and my Engineer Officers having speedily determined the proper situations for erecting batteries, I opened ground on the day following.
- 16. The point of attack was a small fortification, situated on an eminence at the southern extremity of the town; in front of this the enemy had strongly entrenched themselves, and erected batteries in the most commanding situations. The nature of the adjoining grounds was likewise favourable to the besieged; but as the place completely commanded the town, and in some degree the fortress itself, its possession appeared necessary for the success of our operations.
- 17. The breach made by our batteries in the wall of the place, appearing very practicable, on the 23rd December I determined to

assault it during that night, and at the same time to storm the batteries and entrenchments occupied by the enemy. This service was performed at midnight with the most complete success, and in a manner as honourable to British valour and discipline as any achievement of the war.

- 18. My dispatches to your Lordship in Council on this occasion, detail so fully the nature of my arrangements, the plan of attack, and the meritorious conduct of the Officers and troops employed, that it is unnecessary again to dwell on these subjects. By means of the darkness of the night, the enemy were taken by surprise, and prevented from availing themselves of the advantages they possessed, or of making a very formidable resistance. Our loss in men and officers was considerable, but much less than the nature of the attack appeared likely to occasion.
- 19. In consequence of this success almost the whole remaining Artillery of Jeswunt Rao Holkar fell into our possession, and great numbers of his Infantry were cut to pieces in the trenches which they occupied. The Bhurtpoor troops defended the town, where great numbers of them were destroyed, and the rest were compelled to seek refuge within the walls of the fortress. From this they made their escape during the following night, and on the morning of the 25th of December, my troops were in possession both of the town and fort of Deig.
- 20. By so important a blow the hopes of the confederates seemed almost entirely crushed. Besides the destruction of a great many of their adherents, they suffered the loss of a numerous Artillery. The reduction of the fort of Deig likewise deprived them of the possession of the surrounding country, which immediately submitted to the authority of the British Government.
- 21. Having placed a garrison in the town and fort, and made the necessary arrangements for their future defence, I established such regulations as were calculated to secure tranquility in their neighbourhood. Officers of Government were placed in the different towns and villages with the necessary degree of power and authority, and such inhabitants as had fled from their habitations were invited to return by a proclamation, which promised protection and security to their persons and property. These measures had eventually the effect of introducing order, and confidence amongst our new subjects.
- 22. I moved from Deig on the 29th of December, and proceeded in the direction of Bhurtpoor, the capital of the Bhurtpoor state. The Matratta force had fied in this direction, and the Jaut forces.

who had escaped from Deig, had already been received within the walls of Bhurtpoor.

- 23. It would have been more conformable to your Lordship's wishes could I have stationed a sufficient force in the Bhurtpoor territories, and pursued Holkar to extremity with the remainder of my Army. Colonel Murray's force had advanced towards Kotah, and could I have driven the Mahratta chief in that direction, it is probable that his total destruction might have been effected.
- 24. The intimate connection however which subsisted between the Rajah of Bhurtpoor and Holkar was not to be dissolved. The latter was supported by the resources of the former; and though pursued from place to place, could not be expelled from his dominions. The Mahratta Infantry found an asylum at Bhurtpoor, and the Cavalry by extreme vigilance and an early flight, could on every occasion, in a great degree, elude our attacks, whilst they derived whatever supplies they found necessary from the town of Bhurtpoor.
- 25. These considerations evinced the necessity of adopting a plan of operations, which had for its object the reduction of both powers at the same period. Bhurtpoor was the great depôt of the supplies and resources, both of the Rajah and of Holkar; and the fall of that fortress, by depriving them of the means of resistance, promised to involve them in common ruin. I therefore resolved to undertake the siege of Bhurtpoor, as a measure likely to lead to decisive success.
- 26. On my route to Bhurtpoor I inclined towards Muttra, to permit Major General Dowdeswell and His Majesty's 75th Regiment to join me. These had received my directions to march from Cawnpoor, immediately after the battle of Deig, and they were now a very necessary reinforcement to my Army. I arrived before Bhurtpoor on the 3rd of January, 1805, and took up the pesition, which, from all the information I received, appeared most proper to be occupied during the siege.
- 27. Bhurtpoor is a town of great extent, every where strongly fortified. A mud wall of great height and thickness, and a very wide and deep ditch every where surrounds it. The fort is situated at its eastern extremity, and is of a square figure. One side of that square overlooks the country; the remaining three sides are within the town. It occupies a situation that appears more elevated than the town; and its walls are said to be higher, and its ditch of greater width and deepness. The circumference of both town and fort is upwards of eight miles, and their walls in all that extent are flanked

with bastions at short distances, on which are mounted a very numerous Artillery.

- 28. This place derives a considerable degree of its strength from the great quantity of water which its situation enables it to command. Its ditch being filled with this, presents an obstacle very difficult to be overcome. A large expanse of water on the north-west side of Bhurtpoor, disappeared suddenly on the arrival of my Army; and I afterwards discovered that the whole of this had been admitted into the ditch by which the fort and town are surrounded.
- 29. The whole force of the Rajah of Bhurtpoor was collected within the town and fort. The Infantry of Jeswunt Rao Holkar had taken up a position, and entrenched themselves under the walls, and all the inhabitants of the surrounding country were thrown into the place, who were capable in any way of assisting in its defence. Eighty thousand men are stated, by the natives, to have been assembled on this occasion, and though there may be exaggeration in this statement, yet the numbers present were certainly very great

30% The indefatigable exertions of such a multitude, created the most serious obstacles to my operations. Measures were speedily executed to retard my progress, and the effects of my cannon were almost immediately repaired. This perhaps constituted the principal source of that resistance, which in the progress of the siege was found so formidable.

- 3i. The town and fort were very amply supplied with all kinds of provisions and military stores. Bhurtpoor had long been the great mart of these, for the different countries of Hindoostan, and they had been accumulated by the Rajah for the present exigency. The great extent of the place to and smallness of my force, having compelled me to cohine my operations to a particular point, the besieged had at all times a power of deriving supplies from the surrounding country, of which they would have been deprived, could the place have been completely invested.
- \$2. To surmount so many and such important difficulties, required the utmost energy in conducting my operations, and profound professional skill on the part of my Engineer Officers The well-known courage and activity of my troops enabled me to command the former; but the latter were not so completely in my power. However zealous my Engineer Officers were, neither their abilities, knowledge, nor experience were adequate to the occasion; and this cause had doubtless considerable influence in preventing that success which had witherto attended every operation of my Army.

- 33. My Army took up a position about south-west of the town, and the batteries were constructed and opened with considerable effect on the 7th of January. On the 9th it was reported to me that the breach was practicable, and an attempt was made, that night to storm the place, which proved unsuccessful. Our operations were immediately renewed, and a second breach deemed practicable, which induced me again to attempt an assault on the 21st of January, in which we had likewise the misfortune to fail.
- 34. The want of military stores and provisions obliged me to delay my operations for some time subsequent to this period. Supplies however having been obtained from Agra and Muttra, they were again commenced early in February, on a part of the wall at some distance from that formerly breached; opposite to which I had, at the request of my Engineers, moved the position of my Army. On the 20th of February there was a breach in the wall as complete as could be effected, and an assault was resolved on. This unfortunately failed; and a repetition of the attempt, which was deemed advisable, was not more successful on the following day.
- 35. The immediate causes of failure have already been detailed to your Lordship in my several dispatches which anounced our want of success. The more general ones will be found in the circumstances I have above mentioned, respecting the extent and strength of Bhurtpoor, the number of its garrison and other particulars. It is unnecessary to enter further upon this subject; but I feel it my duty to prevent even the slightest stain from attaching itself to the character of our troops, from a want of that success, which their conduct had every tendency to secure.
- 36. The same determined valour was apparent in every attack, that had formerly marked their conduct in the periods of their most brilliant success. Their discipline and persoverance were never more conspicuously manifest. The insuperable nature of the obstacles opposed to them, could alone have withstood their exertions, and though I lament their failure, I must ever feel that their gallantry and good conduct are entitled to my applause and admiration.
- 37. The heavy loss the Army has sustained of brave men and officers is a severe misfortune, and one that I deplore with the most sincere sorrow. c I am convinced however that its ardour has not been damped, nor can it be deprived of its conspicuous superiority. When an opportunity offers, it will again evince those qualities which have laid the foundation, and constituted the support of its glory.

- . 88. In our different attempts to take Bhurtpoor, considerable advantage was secured by the total dispersion of Jeswunt Rao Holkar's broken battalions. These, as was formerly mentioned, had entrenched themselves, and erected batteries under the walls of the town, from whence they were driven with great loss. All the Artillery which they had been enabled to carry from Deig, fell, in consequence, into our possession.
- 39. It has been mentioned in a former part of this dispatch, that a division of the troops of Bombay had been directed to advance from Ougein, for the purpose of intercepting the flight of Holkar; Colonel Murray who formerly commanded these, had been relieved by Major General Jones of the Bombay establishment, and Holkar not having moved in the direction that was expected, I deemed it expedient to order Major General Jones to advance and join my Army at Bhurtpoor. This he effected on the 12th of February.
- 40. My several dispatches have informed your Lordship of the share the Bombay division had in our operations against Bhurtpoor, and of the high degree of approbation their conduct merited. They displayed the same steadiness and gallantry that distinguished the Benggl Army, and had equal claims to my praise. Major General Jones was likewise entitled to my best thanks for his prompt obedience to my orders, and for the celerity with which he conducted his troops into Hindoostap.
- Extract of letter No. IV, from the Commander in Chief, the Right Honourable Lord Lake, to the Governor General, Marquess Wellesley; dated Muttra, 1st July, 1805.
- 1. From the state of my battering train, and the want of necessary stores, it became impossible to prosecute the siege of Bhurtpoor, immediately after the affair of the 21st of February. The guns had in consequence of long and unremitted firing, become for the most part unserviceable; the whole of the Artillery stores in camp had been expended, and a deficiency in the supply department rendered it necessary to obtain provisions, previous to a recommencement of our operations.
- 2. Besides these circumstances, the number of sick and wounded of my Army had accumulated to a considerable degree, and it became necessary, as well for their accommodation as to free the Army from

a serious incumbrance, to send my hospital to Agra, as soon as possible.

- 3. These considerations induced me to quit the position I had occupied, and move with my Army to the north-east, face of the fort of Bhurtpoor on the 25th of February. In this situation, I commanded the roads leading to Agra, to Muttra, and to Deig, and was in consequence enabled to obtain from these places such supplies as were required without danger or molestation.
- 4. Measures were immediately set on foot to repair the injury sustained by my battering guns, and convoys were at the same time detached to Deig, Agra, and Muttra, for the purpose of obtaining such supplies of provisions and military stores, as these places could afford. My Engineer officers were employed in the construction of fascines and gabions, and the most vigourous exertions were made in every department to enable me to resume the siege.
- 5. These preparations were considerably retarded by the great distance of some of those stations, from whence it was necessary to derive my military stores. Agra and Multra could not furnish these to the extent that was deemed necessary to ensure success to our future operations; I was obliged therefore to wait the arrival of supplies from the remote depots of Allahabad, Cawnpoor, and Futtyghur, from whence I had directed them to be conveyed with the utmost dispatch.
- 6. During the period of time that thus necessarily elapsed, my Cavalry, under Major General Smith, had rejoined me, after having effected the expulsion of Ameer Khan from the Company's territorics; and it appeared to me, that this force would be now most advantageously employed in attacking the remaining power of Jeswunt Rao Holkar, and if possible dislodging him from the neighbourhood of Bhurtpoor, and, finally, expelling him from Hindoostan.
- 7. With this view I ascertained as accurately as possible the situation of the enemy's camp, and moved about two o'clock in the morning of the 29th March, with the whole of my Cavalry, and the reserve of the Army under Lieutenant Colonel Don, with the intention of surprising the enemy about break of day.
- 8. Colonel Don with the reserve was ordered to proceed directly to a high village occupied by the enemy's left, whilst I advanced with the Cavalry by a more circuitous rout to the right. My intention by this movement, was to attack their right flank, and to intercept their flight from Colonel Don's party, which from the nature of the country it was probable they would attempt in that direction.

- 9. Colonel Don arrived at this situation at the precise period that was intended. The enemy however had obtained early information of his approach, and their rapid flight put it out of his power to do very considerable execution; but he succeeded in destroying some, and a portion of their baggage fell into his hands.
- 10. I had arrived at the right of the enemy's position nearly at the same period, and having formed the Cavalry into two lines, I moved rapidly forward to the attack. The enemy had likewise in this quarter received the alarm, and were for the most part mounted and prepared for flight. My front line, however, charged so rapidly, that a considerable number of the enemy were overtaken and destroyed, and many of their camels and other cattle fell into my possession. The Cavalry pursued for several miles, till judging that a further pursuit would be useless, I thought proper to halt them and return to camp.
- 11. A few days after this affair, information was brought me that Holkar's force had again collected and occupied a position on the site of Bhurtpoor, opposite to that on which I was encamped at the distance of nearly twenty miles. The prosecution of my endeavours to expel him from Hindoostan required that he should be immediately attacked in this situation, and as a preparatory measure, I ascertained with the utmost accuracy in my power, the nature of the disposition he had made, and of the ground he occupied.
- 12. Having obtained what appeared to me sufficient information, in regard to these circumstances, I moved from my camp about twelve o'clock on the night of the 1st of April, with the same corps that had accompanied me in my attack of the 29th of March. My design was to come upon the enemy, at daylight on the morning of the 2nd, and attack them if possible before they could be prepared for flight.
- 13. My success this day was equal to any hopes I had reason to entertain. I arrived in front of the enemy's position exactly at break of day, and having formed my force into two lines, my Cavalry by a rapid charge, was enabled to break through the enemy's main body, of which they destroyed very considerable numbers.
- 14. The enemy, taught the necessity of extreme vigilance, had been accustomed as a measure of precaution, to keep their horses saddled during the night. By this means in the event of an attack, they were immediately mounted, and had it in their power to escape by flight. On the present occasion however, they did not avail themselves of this means of safety with their usual activity: they had not mounted

before my Cavalry was within the distance of a few hundred yards; and the superiority of my horses, in point of speed as well as strength, enabled them to come up with the enemy before they found their dispersion and escape practicable.

- 15. We pursued the enemy for several miles, and the number of them we destroyed was computed to amount to upwards of a thousand men. When it appeared to me that pursuit could be no longer of advantage, I halted the Cavalry and returned towards camp.
- 16. Our return was by a different route from that by which we had proceeded to the attack; and in a high village which commanded the road, a few miles from the position the enemy had occupied in the morning, a body of about two hundred of the enemy's Infantry had taken refuge.
- 17. From the woody nature of the country, the front of my column had reached the village before they were perceived by the enemy. Though they immediately quitted the village, therefore, for the purpose of making towards a thick wood in its vicinity, they were unable to effect their escape. My advanced guard immediately charged them, and destroyed a considerable number. A few escaped to the wood above mentioned; and about eighty threw down their arms, and were brought prisoners to my camp.
- 18. It is somewhat remarkable that we did not lose a man, either in our attack of the 29th of March, or in that of the 2nd of April. The enemy attempted no resistance, either individually or in a body; their sole object was to escape by flight; and in attempting this, they were destroyed without opposition.
- 19. These circumstances afford sufficient Jemonstration how completely the spirits of the enemy were broken by the repeated defeats they had sustained; and it was no less evident that their numbers had decreased to a very great degree of insignificance. This was, apparent on the morning of the 2nd of April; and the accounts I received from all quarters of their frequent desertions, afforded concurrent testimony of its truth.
- 20. Before this period, several of Jeswunt Rao Holkar's chiefs had made overtures to me for permission to join my Army, and had in consequence been received into my camp. The example of these was at this time, and soon afterwards followed by every chief of respectability belongings to the enemy, and the number of followers which accompanied them was a principal cause of the great reduction of strength and numbers which the enemy sustained.

- 21. In short, there only now remained to oppose us, a miserable multitude of dispirited wretches, whose daily necessities were compelling them to desert the fallen power and ruined fortunes of their savage leader; and Jeswunt Rao Holkar, but for the reception he met with from Powlut Rao Scindia, and the ascendency he afterwards acquired over the council of that chief, must have become a solitary wanderer, and an object unworthy the notice of the British Government.
- 22. The Rajah of Bhurtpoor, soon after the cessation of our operations against his town, began to manifest a consciousness of his inability to oppose our power. The rapid reduction of Jeswunt Rao Holkar's strength was every day more apparent, and he experienced the total inability of that chief to afford him any support. The preparations which he saw making for the renewal of our operations convinced him that his ruin, though delayed, must soon unavoidably overtake him.
- 23. The whole of the country of the Rajah of Bhurtpoor was equally a prey to his friends and to his enemies. Jeswunt Rao Holkar, who derived from him the whole of his support, had nearly exhausted his resources, and he was himself with the whole of his own forces cooped up within the walls of his town and fortress. He foresaw likewise, that though he had litherto resisted the efforts of my Army, he would be unable much longer to struggle against exertions which would be directed by skill, gallantry, and perseverance.
- 21. Runject Sing at first conveyed to me through different channels, his sense of contrition for his past conduct, his consciousness of the state of humiliation to which he was reduced, his desire to withdraw himself from his present allies, and his earnest inclination to renew his connection with the British Government, provided a prospect of forgiveness and future protection was held out to him.
- 25. Though from the very ruinous condition of the Rajah of Bhurtpoor's affairs, I entertained little doubt of his sincere desire again to connect his interests with those of the British Government, I thought it proper to withhold every encouragement to his advances on this subject, until I should be well assured of his compliance with every concession which the interests or honour of Government might render it necessary to propose.
- 26. My motives for this conduct originated in the successful resistance which the Rajah had been enabled to make to the operations against his capital. The neighbouring states unaccustomed to wit-

ness even a temporary failure in any of our military operations, might be disposed under such circumstances, to draw inferences unfavourable to our power, from even the ordinary degree of our moderation and forbearance. A forwardness to accommodate differences might also involve a suspicion of our inability to enface that degree of submission necessary for the atonement of the Rajah's past offences, and for the establishment of that degree of dependance in which the Bhurtpoor state ought to stand in relation to the British Government.

27. To the Rajah's repeated communications therefore, I explained the grounds of entire submission, on which alone he could entertain hopes of obtaining the pardon, and being received under the protection of the British Government; and I pointed out the limitations in his power and resources which would be deemed indispensable, as well for our future security, as in punishment of his atrocious breach of public faith, and his open violation of every principle of gratitude and of honour.

28. The Rajah having considered the conditions necessary to constitute the foundation of any future arrangement, testified his acquiescence in the general plan of accommodation which I had prescribed, and requested permission to send to my camp two persons in his confidence, who might enter into such particular discussions and explanations as might be found necessary. Having assented to this proposal, these persons were received into my camp from Bhurtpoor, on the 10th of March.

29. Soon after this period, that arrangement between the British Government and the Rajah of Bhurtpoor, which has been submitted to your Lordship in Council, was concluded. One of the Rajah's sons was at the same time sent to my camp, as a security on the part of the Itajah, for the due performance of the engagements into which he had entered, and as a formal token of entire dependence and submission, brought with him and delivered into my hands the key of the fort of Bhurtpoor.

30. I have the fullest confidence that it will at all times appear, that the instructions with which I was honoured by your Lordship in Council, were sufficiently attended to in the formation of these arrangements; that the dignity, honour and security of the British Government have been sufficiently consulted; that the Rajah has been punished, as far as his means would admit for the errors of his former conduct, and that an example is held out to the neighbouring petty states, which will prevent them from engaging in measures inconsist-

ent with their respective relations and engagements to the British power.

- 31. This arragement was concluded on the 10th of April, at which time my preparations for a renewal of operations against the town and fort of Bhurtphor had been completed, and I had actually taken up that position which was judged most favourable for a renewal of the attack. Though however the means which I now possessed left little doubt of the certainty of ultimate success, yet I had sufficient reason to be satisfied that the differences with the Rajah of Bhurtpoor had finally been adjusted in this amicable manner.
- 32. The very advanced period of the season would have rendered the operations of a siege extremely difficult, and Bhurtpoor might still have protracted its defence for a considerable length of time. My Europeans employed on the duties of the trenches, would have been exposed to the utmost severity of the hot winds, which must have been fatal to a great number, and so extensively injurious to the health of others, that my whole force would have been greatly weakened.
- 33. Other considerations at this time rendered an accommodation with the Rajah of Bhurtpoor a very desirable object. The importance of expelling Jeswunt Rao Holkar from Hindoostan was sufficiently obvious, and this, notwithstanding the great dimunition of his numbers, would have been difficult to effect, whilst Bhurtpoor remained to him as a place of refuge and source of support. Deprived of these however he could only derive his safety from a rapid and immediate flight.
- 34. About this period too the movements of Dowlut Rao Scindia's Army, and the accounts received from the British resident at the Durbar of that chief, had afforded grounds to apprehend that designs were meditated against the British Government, very inconsistent with those engagements which had terminated the former war.
- 35 Under these circumstances therefore it was of importance that my Army should be liberated from the necessity of prosecuting a siege, and prepared to meet whatever might be the exigencies of the occasion. A knowledge that my whole attention could be directed towards Dowlut Rao Scindia, appeared likely to compel that chief to relinquish any enterprise he might meditate; and if he should be rash enough again to engage in hostility with the British Government, I should be at liberty to prosecute against him whatever plan of operation might be deemed necessary.

- 36. The conclusion of peace however with the Rajah of Bhurtpoor, and the consequent state of readiness for operations in which my Army was placed, did not more than the obligations of his own engagements, and the recollections of his former misfortunes, operate in changing the designs of Dowlut Rao Scindra. A succession of events, the tendency of which was not doubtful, served clearly to develope his intentions. These it is unnecessary at present to explain fully, but a short review of them may be proper to illustrate the course of my future proceedings.
- 37. During the war with Jeswunt Rao Holkar, Scindia had never afforded that cooperation which his engagements with the British Government, and the degree of advantage held out to him from a successful prosecution of hostilities, should have obliged him to furnish. This could not be palliated on the ground of deficiency of means, and the weakness of his Government, as he found both resources and power to pursue a conduct in direct violation of his engagements, and finally to menace even an invasion of the British territories.
- 38. Your Lordship's attention has been forcibly directed to the atrocious outrage committed on the person and suite of the British Resident at the court of that chief. The nature and circumstances of this transaction, and the backwardness to afford reparation, have given strong grounds to suppose that it took place by the consent and with the connivance of Dowlut Rao Scindia.
- 39. Subsequent to this event, the representations and remonstrances of the British Resident have never received due attention at the court of that chief, and Serjey Rao Gautka, a person whose profligate character and whose hostile disposition to the British Government are equally notorious, has obtained the full confidence of Dowlut Rao Scindia, and been entrusted with the exclusive directions and management of the affairs of his Government.
- 40. Under these circumstances, the advance of Scindia's Army from Sagur, towards the frontier of the British possessions; the military preparations in which that chief has for a long time been assiduously engaged; his correspondence with the enemies of the British Government, which was divested of even the cloak of dissimulation; and finally, his junction with the battalions and Artillery of Ameer Khan, which, as was above mentioned, had been left in the vicinity of Maultan Pass, seemed not only to remove every doubt of his hostile intentions, but to constitute acts of undisguised and positive hostility.

- A1 These considerations dictated the necessity of forming such arrangements as were calculated to oppose the progress of Dowlut Rao Scindia, and to defeat whatever hostile attempts his rashness might induce him to undertake; the arrival of that chief in the neighbourhood of Narwah, and his subsequent advance towards the British frontier, rendered it obvious that these measures should be immediate and effectual.
- 42 I had previously instructed Colonel Martindell to be extremely vigilant in regard to the movements of Dowlut Rao Scindia, and to move towards whatever point of our frontier that chief appeared to menace. I now directed him to advance with his detachment by the route of Gualior, towards Dolpoor, and to occupy a commanding position near the southern bank of the Chumbull in that neighbourhood. I at the same time disencumbered my own Army of its heavy Artillery and such baggage as could be dispensed with, and put myself in a condition to advance rapidly to the same quarter, should such a movement become necessary.
- 43. I had the satisfaction to learn from your Lordship's communications at this period, that you are tully apprised of the necessity of the arrangements I was forming, and approved of the immediate adoption of such measures as I had in contemplation to pursue.
- 44. Dowlut Rao Scindia's Army halted at Subbulghur, a situation about twenty miles distant from Jatpoor, the position which Colonel Martindell's detachment had by my orders occupied. From that situation Scindia informed me that he intended to advance to Bhurtpoor, and that the object of his movements was to effect an accommodation between the British Government, the Rajah of Bhurtpoor, and Jeswunt Rao Holkar, and to arrange certain points in regard to himself, which he said had been explained in his communications to your Lordship.
- 45. Scindia at the same time dispatched his Minister, Serjey Rao Gautka, with a large body of Cavalry towards Bhurtpoor, in the neighbourhood of which be arrived nearly at the conclusion of peace with the Bhurtpoor state; Jeswunt Rao Holkar immediately joined his remaining forces to those of Serjey Rao Gautka, and these two persons employed their united endeavours, to induce the Rajah of Bhurtpoor to violate the engagements which be had just contracted with the Brititsh Government.
- 46. Dowlut Rao Scindia's pretext of becoming arbiter in a contest, in regard to which he had failed in the performance of all his obliga-

tions, was little calculated to veil the nature of his real intentions. The menacing position he had occupied, and the large force at the head of which he pretended to dictate, were as little likely to be regarded as compatible with his established relations; when to these were added the junction of the force under his minister, with that of Jeswunt Rao Holkar, and the attempts made to detach the Rajah of Bhurtpoor from the connection into which he had entered, it became impossible to consider Dowlut Rao Scindia in any light but that of an enemy.

- 47. My Army was now completely disencumbered, and at liberty to act according to whatever exigency might occur. I was likewise at this time favoured with your Lordship's instructions in regard to the conduct I was to observe towards Dowlut Rao Scindia, and the conditions to be proposed to the chief, on his compliance with which depended the existence of those relations which had formerly been established on the commencement of military operations.
- 48. My communications to Scindia were strictly of the nature prescribed by your Lordship in Council; and in conformity to the instructions with which I was honoured, I moved with my Army from Bhurtpoor on the 20th of April, and proceeded in the direction of Dolpoor, from whence I might pursue that system of measures, which the result of the communications I had made, or the further commands of your Lordship might point out.

- 711. The Rajah of Bhurtpoor, however, aware that the exertions of the British forces must ultimately be successful, and that the utter destruction of his power must be the consequence of our success, dispatched on the 25th of February, a letter to His Excellency the Commander in Chief, proposing an accommodation with the British Government.
- 712. In that letter the Rajah of Bhurtpoor indirectly acknowledged the treachery of his conduct, expressed an earnest desire to be restored to the friendship of the British Government, and offered, under proper encouragement, to proceed to the British camp. In his reply to that letter, the Commander in Chief apprised the Rajah of Bhurtpoor, that if the Rajah was sincerely disposed to maintain in future

his fidelity to the British Government, and would consent to reimburse the expenses to which the British Government had been exposed by the consequences of his conduct, the Rajah might repair to the British camp, and would be admitted to personal communication with His Excellency the Commander in Chief. In his reply to that letter, however, the Rajah signified that he had directed a person in his confidence to attend His Excellency. The Commander in Chief therefore replied by adverting to the Rajah's deviation from the tenour of his own proposition, and by intimating that the insincerity of the Rajah would preclude all confidence in the representations of his agent.

713. In his replies to the Rajah of Bhurtpoor's letters, the Commander in Chief purposely avoided any explicit declaration of the terms on which the Rajah might be permitted to retain any portion of his former power and resources, and required as a preliminary condition, his consent to afford to the British Government compensation for the expenses which he had occasioned.

714. The terms of accommodation which His Excellency the Commander in Chief deems it advisable, at a proper season, to propose to the Rajah of Bhurtpoor, are:

1st. That he shall be confirmed in the possession of territory yielding an annual revenue of ten or twelve lacs of rupees.

2ndly. That he shall surrender the fortress of Deig, and its dependant territory, &c.

3rdly. That he shall reimburse, to the extent of his means, the expenses which his conduct has occasioned.

715. The Commander in Chief was of opinion, that under actual circumstances these terms were proportionably advantageous both to the Rajah of Bhurtpoor and the British Government: to the Rajah by enabling him to avoid the extremity of ruin; and to the British Government by depriving Holkar at an early period of time of the only remaining bulwark of his power.

716. The Governor General had previously transmitted to His Excellency the Commander in Chief, a communication of his sentiments with regard to the expediency of detaching the Rajah of Bhurtpoor from the interests of Holkar, and by the most desirable terms of accommodation with the Rajah.

717. On the receipt of the plan proposed by the Commander in Chief, the Governor General transmitted further instructions for the conduct of the negociation in the event of its renewal. It appeared to His Excellency the Governor General to be necessary to state the

conditions which His Excellency considers to be indispensable under any engagement which might be concluded with that chieftain.

718. Those conditions have been stated by the Governor General to be:

1st. That the Rajah of Bhurtpoor should furnis! such security as the Commander in Chief should deem satisfactory for the exact fulfilment of the engagement which he might conclude with the British power.

2ndly. That the Rajah of Bhurtpoor should completely abandon the cause of Jeswunt Rao Holkar; that he should withhold from Jeswunt Rao Holkar, every species of resource within his power to controul; and that he should unite with the British Government in endeavouring to expel Jeswunt Rao Holkar and his troops from the limits of his possessions.

Strdly. That the Rajah of Bhurtpoor should indemnify the British Government, to a certain extent, for the expenses to which it had been exposed in the prosecution of hostilities against the Rajah of Bhurtpoor and Jeswunt Rao Holkar.

719. His Excellency the Commander in Chief has been requested to exercise his judgment in determining the extent of the compensation to be demanded. With a view however to afford to the Rajah of Bhurtpoor an additional inducement to adhere to the faith of the engagements, the Governor General suggested to His Excellency the expediency of intimating to the Rajah, that the British Government would be disposed to consent that the payments should be gradual, and should admit of a future reduction in the stipulated amount of compensation, in proportion to the zeal and fidelity which the Rajah should manifest in fulfilling the conditions of his engagements.

4thly. That the fortress of Deig, and the territory dependant upon it, should continue in the possession of the British Government until peace should have been completely established in India.

720. The permanent possession of that fortress and territory did not appear to the Governor General to be an object of sufficient importance to hazard, for the sake of its attainment, the advantage of detaching the Rajah of Bhurtpoor from the interests of Jeswunt Rao Holkar.

721. On these conditions the Governor General signified to the Commander in Chief his disposition to confirm the Rajah of Bhurtpoor in the possession of all the territory which he occupied at the commencement of the present war, with the exception of the districts

granted to him by his Excellency the Commander in Chief after the late war (as stated in the 20th paragraph of this dispatch) and lately resumed by the British Government.

722. The Governor General further signified to the Commander in Chief, that, in the spinion of the Governor General, it was extremely important to stipulate with the Rajah of Bhurtpoor for the payment of an annual tribute; but that the exigency of that stipulation was not such as to require that it should be rendered an indispensable condition of the proposed arrangement.

723. The Governor General in Council is disposed to credit the actual disposition of the Rajah of Bhurtpoor, to effect an accommodation with the British power, and deems it highly probable, that when the British Army shall have received fresh supplies for the renewal of the siege of Bhurtpoor, the Rajah will submit to the proposed conditions.

Copy of the Treaty of Peace between the Bengal Government, and the Prince of Bhurtpoor, with the communications made of that event to the Court of Directors or Secret Committee, on that occasion.

(Copy.)

Treaty of Amity and Alliance between the Honourable the East India Company, and Maharajah Seway Beshoinder Runject Sing Behadur, Behadur Jung, settled by His Excellency General Gerard Lake, Baron Delhi and Laswasee, and Ashton Clinton Commander in Chief of the British forces in India, in virtue of authority vested in him by His Excellency the Most Noble the Marquess Wellesley, Knight of the most illustrious order of St. Patrick, one of His Britianic Majesty's Most Honourable Privy Council, Governor General in Council of all the British possessions, and Captain General of all the British land forces in the East Indies, in behalf of the Honourable East India Company, and by Maharajah Seway Beshoinder, Runjeet Sing Behadur, in behalf of himself, his heirs, and successors.

Article 1st. A firm and permanent friendship is established between the Honourable the English East India Company, and Maharajah Seway Beshoinder Runjoet Sing Behadur, and between their heirs and successors.

Article 2nd. As friendship has been established between the two states, the friends and enemies of either state shall be friends and enemies of both, and an adherence to this condition shall be constantly observed by that state.

Article 3d. Whereas circumstances have occurred, which have interrupted the friendship formerly subsisting between the Honourable Company and Maharajah Runjeet Sing Behadur, which friendship is now renewed in order to prevent the recurrence of such circumstance. The Maharajah agrees, as a security to the British Government, that one of his sons shall constantly remain with the officer who may command the British forces in the suburbs of Delhi or Agra, until such time as the British Government may be perfectly satisfied in regard to the Maharajah's fidelity; and the Honourable Company on the other hand, agrees, that upon satisfactory proof being afforded of the Maharajah's fidelity and attachment to the British Government, the fort of Deig, which is now in the possession of the officers of Government, shall be restored to Rajah Runjeet Sing.

Article 4th. Maharajah Runjeet Sing binds himself to pay to the Honourable the English East India Company, in consideration of the peace now granted to him, the sum of twenty lacs of Furruckabad Sicca Rupees, by instalments as hercunto subjoined; and the Honourable Company, in consideration of the losses the Maharajah has suffered, and the destruction of his country, and the representations he has made of his inability to provide means for the immediate payment of this amount, agrees to receive it by instalments as undormentioned; and the Honourable Company further promises, that if at the period when the payment of the last instalment of five lacs of Rupees shall become due, the Government shall be satisfied with the proofs of the Maharajah's fidelity and attachment, the pay of this instalment shall be remitted.

			•
To	be	paid	immediately.

Furruckabad Sicca Rupees	····· 500,060
In two months	200,000
. •	Total Sa. Rs. 500,000

Instalments.

At the end of the year 1862 Summuht (April 1806)	300,000
At the end of the year 1863 Summuht (April 1807)	,
At the end of the year 1864 Summuht (April 1808)	
At the end of the year 1865 Summuht (April 1869)	500,000
	-

Total Sa. Rs. 2,000,000

Article 5th. The country which was formerly in the possession of Maharajah Runjeet Sing, previously to the accession of the English Government, is now confirmed to him by the Honourable Company: and the Honourable Company, in consideration of the friendship now established, will not interfere in the possession of this country, or demand any tribute on account of it.

Article 6th. In the event of any enemy evincing a disposition to attack the dominions of the Honourable Company, Maharajah Runjeet Sing binds himself to assist to the utmost of his power in expelling the enemy, and in no measure to hold any correspondence, to be in any way connected with, or assisting to the enemies of the Honourable Company.

Article 7th. As by the second Article of the protent Treaty the Honourable Company becomes guarantee, to make Rajah Runjeet Sing for the security of the country against external enemies, the Maharajah hereby agrees that if any misunderstanding should arise between him and the Sircar of any other chieftain, the Maharajah will, in the first instance, submit the cause of dispute to the Honourable Company's Government, that the Government may endeavour to settle it amicably, agreeably to justice and ancient usage. If from the obstinacy of the opposite party, no amicable terms are to be settled, then Maharajah Runjeet Sing may demand aid from the Company's Government. In the event above stated in this article, it will be granted.

Article 8th. The Maharajah shall not in future entertain in his service, nor give admission to any English or French subjects, or any other person from among the inhabitants of Europe, without the sanction of the Honourable Company's Government; and the Honourable Company also agrees not to give admission to any of the Maharajah's relations or servants without his consent. The above treaty, comprized in eight articles, has been duly concluded, and confirmed by the seals and signatures of his Excellency General Gerard Lord Lake, and Maharajah Seway Beshoinder Runjeet Sing Behadur at Bhurtpoor, in the Soobah of Akberabad on the 17th day of April 1805, corresponding with the 16th of Mohurrum 1220 Hijee, and with the 3rd day of Bysaak 1862 Summuht.

When a treaty containing the above eight articles shall be delivered to Maharajah Seway Beshoinder Runjeet Sing Behadur, under the seal and signture of His Excellency the Most Noble the Governor General in Council, the present treaty, under the seal and signature of His Excellency General Gerard Lord Lake, shall be returned.

A true copy.

J. ADA71,
Deputy Secretary to Government.

Extract of a letter from the Governor General in Council to the Secret Committee, dated the 13th May, 1805.

15. In our dispatch of the 24th of March, the Governor General in Council had the honour to apprise, your Honourable Committee that the Rajah of Bhurtpoor, had made overtures of accommodation to His Excellency the Right Honourable the Commander in Chief; and the Governor General in Council also stated to your Honourable Committee in that dispatch, the substance of the instructions with which the Commander in Chief had been furnished on the subject of the terms which the Governor General in Council, was disposed to grant to the Rajah of Bhurtpoor. His Excellency the Commander in Chief having been induced by the entreaties of Rajah Runjeet Sing, to consent to receive Vakeels, to be dispatched by that person for the express purpose of adjusting the terms of accommodation. Vakeels were dispatched and arrived in the camp of the Commander in Chief on the 18th of March. The detail of the negociations which ensued will be communicated to your Honourable Committee by a letter from the Governor General in Council, which will be forwarded on the Teignmouth, Company's armed Cruizer, now under dispatch. By the present dispatch which proceeds over land, the Governor General deems it sufficient, in addition to the summary statement, to transmit to your Honourable Company, a copy of the treaty which was finally concluded with Rajah Runjeet Sing on the 17th of April. Your Honourable Committee will observe, that the terms of that engagement are in conformity to the spirit of those which were prescribed by the instructions to the Commander in Chief of 19th March, a copy of which accompanied our dispatch of the 24th of the same month.

16. The Governor General in Council deeming the conditions of the treaty to be in every respect honourable, and advantageous to the British Government, has ratified that engagement.

- 17. The son of the Rajah of Bhurtpoor arrived in the British camp on the 11th April, as an hostage, and continues to attend His Excellency the Commander in Chief.
- 18. On the 8th of April, all the military stores requisite for the resumption of the siege of Bhurtpoor, having previously arrived, the British Army moved to the position from which the Commander in Chief had resolved to recommence the operations of the siege of Bhurtpoor; but the necessity of renewing the siege having been precluded by the submission of Rajah Runjeet Sing, the battering train, and all the necessary stores were subsequently dispatched to Agra-

ARTICLE II.

Observations upon the present Regulations for providing Remount Horses for the Bengal Horse Artillery.

To the Editor of the British Indian Military Repository.

SIR,

IN fulfilment of my promise, "to continue my remarks on points connected with the efficiency of the Horse Brigade of Artillery," I submit to the public, and I hope to those in whose hands the remedy is, the following observations on the regulations which are now in force for providing for the remount of that corps. In attempting this, my subject is two-fold:

First, I wish to bring to notice the disadvantages under which this corps labours, when compared with the positive advantages and privileges that the corresponding corps of H. M.'s Army, of the Madras Army, and of the Bombay Army enjoy. And,

Secondly, I intend to shew that, generally, the common Country horse is unfit for Horse Artillery purposes.

In endeavouring to maintain, and argue on, these positions, I am aware that I shall be led into comparisons which may clash with the feelings or prejudices of the other mounted parts of the Bengal Army; not because I ask for any unwarrantable concession, but because the usage of the Army has heretofore been against me. By persons who think in this way, I shall be deemed but a mere innovator. To them, however, I

say, if what has been persisted in for 20 years should in the 21st be found irreconcilable to sound sense or common justice, would it be convenable to reason to argue, because an evil (and I hope to be able to prove that it is an evil) has been tolerated for such a length of time, that it should be continued for ever? or would it not better become rational beings to say, "We have been in the wrong road a very long time, the sooner we get into the right one the better?" The latter, I am sure, will be the sentiment of all reasonable men. I have digressed thus in order to deprecate the feeling that, in what I am about to claim for the Horse Artillery of this Presidency, I trench on the rights of any other branch of the service; or, that what I ask for is not founded on strict justice, on common sense, on the example of that country to which we all belong, and whose Army has reached such a high station in the ladder of perfection, and on the custom of every other state that possesses this arm.

2. In H. M.'s Army it is conceded that Horse Artillery, to do the duties expected from it, should possess horses of much superior powers to those available for Cavalry purposes. To procure such horses 40£ sterling are allowed for each horse, besides various other privileges too numerous to be mentioned here. I shall be content with the simple, but well known, fact of the sum allowed for the purchase of a horse for the Royal Horse Artillery. It will, alone, be more than sufficient to uphold my argument. The sum, for the purchase of a horse for the Light Dragoons, is 25£. Can words—can language of any kind, tend to place in a stronger light the view which the King's Government takes of the relative duties of the Horse Artillery and Dragoons.

than the above concise statement?—For the Horse Artillery horse 40£ are given—for the Light Dragoon horse, but 25£! Will any one credit me when I say that, on the Bengal Establishment, it is deemed necessary for a Light Dragoon to have a horse of equal powers with one for the service of the Horse Artillery? That, to carry a single horseman and his equipments, a horse of the same strength and qualities is as essential to the Dragoons as he is to the Horse Artillery, where he has to carry a rider, a heavy coarse harness, the implements for working a gun, and to bear his proportion in the draft of the ammunition, and of the gun itself. Yet to this "lame and impotent" conclusion we must naturally come; or wherefore the regulation which places Dragoon Regiments and the Bengal Horse Artillery on an equal footing with respect to the price allowed for their horses, and which grants only, to the latter corps, the trifling advantage of choosing the first horse from a string of one hundred perhaps? And this too when the rules of the service, to which the former body belongs, estimate the labour entailed on the two horses, in the proportion of nearly 2 to 1! I will not however pause here. I will exhibit what is required from a horse of the Horse Artillery, and leave it to every candid man to draw his own conclusion. I may observe here, that the practice, existing in H. M.'s Army, has stood the test of a seven years continued trial.-I allude to the Peninsular and Continental wars, from 1808 to 1815; and, it is but fair to suppose, that the principle which has stood such proof, is founded on necessity and just consideration for the due efficiency of that Army in all its branches.

3. A troop of Bengal Horse Artillery, consists of guns of mixed calibres. It will be but fair to all parties, in calculating the work its horses have to do, to make the estimate neither from the heaviest, nor yet from the lightest piece of ordnance. A happy medium is presented by the 54-inch howitzer, which is, in nearly the same proportion, as much lighter than the 12-pounder as it is heavier than the 6-pounder. The weight of a 54-inch Horse Artillery howitzer is about 26 cwt. that is, as it stands in the field: gun, carriage, and limber. I have, purposely, avoided including the limber box, which, however, is loaded with a proportion of ammunition and petty stores. One sixth of the 26 cwt. each horse, in harness, ought to draw. In addition to this, he has a rider on his back—a set of harness weighing 4 stone—two men carried on the gun, and the implements for working it.-The Horse Artillery man is armed with a Cavalry sabre, a pair of pistols, and carries balled cartridges in pouch. Now a Light Dragoon horse has only his rider, with his arms and accoutrements, to bear up.-A Light Dragoon is armed, I believe, with a sabre, a pair of pistols, a carbine, and carries also balled ammunition in pouch. The difference then in the arming of the two men consists only in the carbine of the dragoon, which difference is made up I think by the spunge staffs, the portfires &c. carried by the Artillery Consequently a horse attached to the Horse Artillery, has to sustain his proportion of the draft of the gun-4 stone weight of harness-the men riding on the gun, and the implements for working it, in excess to what the Dragoon horse has to do. Can I possibly add to this argument? Yes. It surely requires a much more powerful againal to bear up the pole of a heavy

gun, to arrest its progress when in motion, and to stand the sudden wheels; than it does to carry a light Dragoon in a charge or a skirmish! If the heavy Cavalry at home are not even on an equality with the Horse Artillery in the above respects, why should the Light Dragoons in this country be so with the Bengal Horse Artillery? And why should the Horse Artillery of this Presidency be a singular example? I have stated the rule in the King's Army. I may now shew what is observed in the armies of Madras and Bombay-of the two junior Presidencies of India! On the Madras Establishment a much larger sum is not only allowed for the purchase of horses for its Horse Artillery than that for horses for the Cavalry serving there, but, such is the opinion of that Government, as to the necessity of keeping it in the most effective state, that extraordinary and peculiar privileges are granted to it for 'that purpose. It has not only a much greater proportion of men and horses (although the Bengal Horse Artillery has exactly the same number of guns and waggons to bring into the field as it has) but it has also the excellent privilege of being able to get rid of any beast which, from vice, impatient spirit, or debility, may, on trial, prove unfit for it. Has the Bengal Horse Artillery any rights of this nature? Experience has proved the wisdom of what has been done for the Madras Horse Artillery. There is not a Regiment on that side of India that has been harder worked, done better service, or bears a higher character than that gallant corps; and I am proud to bear testimony to it. The Bombay Horse Artillery, though of late organization, is endowed, I am informed, with similar privileges. Is it requiring too much then, when we ask for the Horse Artillery of the

Governing state to be placed on as efficient a footing as the same corps in the subordinate ones? Are we requiring any thing impracticable when we say, "Do unto the Bengal Horse Artillery as it has been proved expedient to do unto that of His Majesty's Army, of the Madras Army, and of the Bombay Army"? Do we require what is extravagant in our solicitation? And do we entreat for any thing unreasonable in saying, "to that, arm which has the most laborious work to do, grant the best horse, that thereby what is wanted of it may be performed in the best possible manner?" Were a Colonel of Light Horse, in England, to make official application for an equal sum, to be granted to him for the purchase of horses for his Regiment, with that allowed to the Horse Artillery, on the plea that it required a horse of the same powers to carry his men as it did to do the duties of the latter named corps; would he be attended to? Do we ask then for more than what is strictly just? I feel that each impartial man must answer, "You do not."

4. To obtain superior horses for the Horse Artillery, a small sum must be added to that which is now allowed, for a horse for the Light Dragoons; if the difference were but 20 rupees to gain those 20 rupees, the native dealers would bring their best horses to that corps which wants them the most. If in England, if at Madras and Bombay, where horses of the most generous dispositions are easily procurable, it has been found absolutely necessary to grant to their Horse Artillery every possible facility in mounting themselves; how much more imperiously is this Government called upon to grant the same rights to its Horse Artillery, where, in every year's remount, for two quiet horses, three vicious and intractable beasts are received!

5. And now to my second position: That the common country horses are unfitted, from badness of temper, impatience, and violence, for Horse Artillery duties. I mean that this position should involve the consequence that, if the best produce of the Government stud was allotted to the Horse Artillery, and not appropriated to defray a part of the expenses of the establishment, the measure would not only be an excellent one in regard to the increased efficiency of that body, but also one of economical expediency. The nature of the work required from a horse attached to the Horse Artillery, is peculiar. It is confined to draft. To take to this kind of labour properly the first requisites are, docility, patience and boldness. Are these the characteristics of the common country horse? Is he not, rather, vicious, impetuous, timid, and full of tricks?—qualities, it may be said, that render him unfit for any service; but, I contend, most particularly so for that which requires draft from him. His bad temper affects but one man in a regiment of Cavalry—his infimediate rider—he may kick and rear with him as much as he pleases, and all his rider has to do, if he cannot keep him quiet, is to rein him back and to withdraw him from the ranks; the regiment proceeding without further annoyance from him or feeling his loss. Look to the same kind of animal harnessed, with five other horses, in a gun. There, he is no longer an independent agent—he is but one part of a powerful machine; but this power may be rendered useless by his evil disposition. The presence of a vicious horse in draft may deprive the service, in time of need, of a gun (of one sixth of a troop of Horse Artillery) which, instead of its being a formidable offensive weapon, may prove an impediment, in many cases,

to the progress or operations of an Army. The vicious horse, in draft, not only creates delays and gives rise to" accidents, but, from his constant worrying of the other five yoked with him, also induces them, though perhaps otherwise perfectly quiet and well disposed, to enter into the scuffle, in self-defence, and to exhibit a scene of combined rears, biting, and kicking! This is not the greatest evil to be apprehended from an unquiet horse. You are obliged to work him; and being in communication with such a one corrupts, in time, the manners of better horses. In consequence of the uncertain temper of the common country horse, the present system, of having each horse in the gun ridden by a separate man, is obliged to be adopted: for, such is their general violence, it has been found utterly impossible for one man to control two of them: * this is attended with many inconveniences, and it is only just to suppose that the principle, which has stood the test of experience in the Royal Horse Artillery, must be a good one. In that corps the guns are driven postillion fashion—the gunners are mounted on independent horses-move with the gun, and when it is brought into action have only to dismount and to serve it. By this arrangement the gunners may, in emergent cases, act as Cavalry, and instances are on record of their having protected the drivers from the assaults of attacking horse, and of having covered their guns when obliged to retire from want of ammunition. So it is at Madras-so at Bombay. But

^{*} Two men, as postillions, drive two pair of horses in the ammunition wagons of the Bengal Horse Artillery. We do not therefore see why the same system should not be adopted with the guns, when Government furnishes the corps with generous tempered horses for the outriders. Ep.

this desirable object cannot be attained in Bengal until a better race of horses is furnished to its Horse Artillery. At present the services of the syces in this latter corps, are more necessary than they ought to be. According to the present way of telling off the men, when the gun is prepared for action, the riders of the three off horses, are all obliged to dismount—to leave their steeds to the care of the near riders, (who do, in Bengal, the duty of mere drivers), and to go and man the gun.* The consequence is, that, it requiring all the near rider can possibly do to control and keep quiet his own horse, under the repeated discharges of the cannon immediately behind him, and his own wicked inclinations, the off horse would be in a great measure left to himself to do that which best pleased him, were the syces not up to lay hold of and to restrain him. I do not mean to say that we have not many quiet and serviceable country horses, but they are all so capricious in their tempers, that for 5 or 6 years they may continue in a most quiescent state, and in the 7th, without any apparent cause, become perfect devils. I am most anxious not to be misunderstood on this point. My argument is chiefly founded on what occurs in cantonments where the horses are well fe's, and comparatively little worked with what they would be were they on active service; consequently the wicked beast will be worse in the one situation than in the other. In cantonments the inspecting officer expects to find your horse in fine and sleek condition, as well as that your

^{*} During our service with the Bengal Horse Artillery the centre near rider also dismounted to take his place at the gun, leaving the the horses to the front and rear near riders. We suppose this is the case now. Ep.

positions should be taken up with rapidity and precision. The appearance of a Regiment is looked to in this case, perhaps very nearly as much as its real efficiency. But the great chiect to the Commander of an Army in the field would be, the celerity with which a battery. reached its destined point, and the execution it made when there. The horses might be thin and badly groomed, but these would be secondary considerations with him. I have seen the Bengal Horse Artillery in the field, and I am free to say that it has always performed the duties required from it, notwithstanding the drawbacks alluded to, in as efficient a manner as any other corps of the Army; but what I contend is impolitic is, that a branch of the Army of acknowledged use, and kept up at some expense should be exposed to any contingency when such might be so easily obviated.

6. I have thus pointed out in what qualities I deem the common country horse deficient when applied to the Horse Artillery. I shall now, as concisely as possible, take a view of the description of horses produced by the Government stud, and shew, that if similar horses to those which the Horse Artillery received in the year 1817, were still sent to it, that corps would be highly benefited, and the Government no loser by the measure. In the year 1817 the pernicious plan of selecting the best stud horses for private sale, in order to the defraying of some part of the expense of 'the establishment, had not a being; at least, I should judge so from the horses we then got, and those we get now: for I do not know positively that this was the case. The consequence was that in that year, and the antecedent ones of course, such horses joined the corps as the most fastidious Commanding Officer could not object to.

The Horse Artillery received in that year, and I speak from personal observation, horses which, in the language of the corps, are denominated 12-pounder horse -that is, animals capable of encountering the heaviest work. These horses have been in constant work ever since—a period of six years; and are now as fine, and sound on their legs, as on the day they joined, and promise to continue so for the next eight or ten years to come. But this is not all-I will go back to the time of the Ganjam stud. If I am rightly imformed, no such ruinous regulation existed there: but, however it may have been, the fact is incontrovertible, that there are now horses here, the produce of that stud, which joined in 1810, and who still have their limbs like those of colts notwithstanding the shocks and labour they must have undergone in a service of 13 years in guns. Will any one assert that such examples can be addiced in the cattle sent from the stud now-a-days? really melancholy to contrast the present degenerate race with those of other days. It is not in reason to hope that they will last as long or do the work as well as their predecessors: they have not the bone—they have not the substance for it. These latter to be sure shew, generally, a great deal of blood, and the most of them are well calculated to carry a single man, but it is really distressing to observe a willing little horse, almost buried in a heavy harness, straining each nerve and cracking every sinew in attempting to drag along a ponderous gun. It remains only now to show that, if the strongest stud horses were given to the Horse Artillery, not merely on account of their strength, but from their possessing other qualities, in which the country horses are deficient, they would add greatly to the efficiency of that corps.

And first then, they are particularly famed for quietness of temper, and tractability of dispositionfor the case and quickness with which they break in -and above all for the willingness they display in applying themselves to the draft. They seem to pass over, unheeded, the pressure of the collar, the friction of the traces, the jingling of the chain part of the harness, the repeated shocks they receive by coming suddenly in contact with the collars, the astounding rattling of the gun carriage at their heels, and lastly, but certainly not the least of their qualifications, the total absence of that inclination to fight with their own species, which is so prevalent amongst country horses. This last good quality, I have shewn above, is almost indispensable in a Horse Artillery horse, which may frequently be left without other controll than his own good or bad disposition. Perhaps it is this above every other characteristic which renders the stud horse so valuable to the Horse Artillery. He can be left to his own guidance with confidence, while the men are employed at the gun. He never attempts to kick at or bite his neighbour! No-I have seen stud horses stand nose to nose like to so many lambs. They never, by kicking and pulling, defeat that precision which is so essential to use ordnance with effect! From whence then arises the difference, in this respect, between them and the country horses?—it is of easy solution. The native dealer, at two years old, ties up his colt neck and heels, bandages his eyes, keeps him in constant darkness, and entirely separates him from his kind. No wonder that, when he attains comparative freedom, he perceives an enemy in every horse he meets, and is eager to attack him! The stud colt, on the reverse, is allowed to run at large to the very last, is herded with a number more, becomes acquainted and fond of his kind, and gives the happy neigh to them under whatever circumstances they may be brought together.

7. I am also prepared to show that even on the score of economy (and that appears the vital principle of the day) it would be advisable, for Government to allot, for the service of the Horse Artillery, as many of the strongest stud horses as it possibly could. There is not a shadow of doubt that the capable stud horses do the work of that corps better, and for a longer time, than any country horses. The reason is simple: the former reserves his strength to meet all demands made on it; the latter expends his, in striving to get rid of them. The former does what is required of him with a good grace; the latter seldom, unless forced to it. The quiet stud horse remains an efficient horse, while the country one is blistered, fired, and ultimately cast! The shortened period of the service of the country horse is not to be accounted for by supposing that, in consequence of his wickedness, he is more worked than the quiet stud one. No such thing—the reverse is generally the The quiet horse is in almost constant demand; he is required for the school lessons in horsemanship, of both officers and men: for it would not only defeat your object, but be highly improper to place a novice on one of the vicious tazees. The quiet horse is also always called on when any thing particular is to be done, such as accompanying young horses in their first essays in draft and continuing with them until thoroughly broke in, and for any other duties of a like nature, all extra to his regular work in the exercise of the corps. Upon the whole therefore it may truly be said, that the quiet horse leads the most unquiet life; whilst his more wicked brother lives comparatively in clover, and laughs at his docile and more enduring comrade!

It has been calculated, from authentic data, that a stud horse, at four years old, costs Government between 4 and 500 rupees, (by the bye, officers of the Army are obliged to pay 800 rupees for the same animal); the regulated sum for a country horse, for the Horse Artillery, is 450 rupees. Now I think I may fairly assume that a good blood horse works, in the proportion of 3rd, longer than a common country horse. It follows then that a saving of more than 30 per cent would accrue to Government on every stud horse (of the kind I have been describing) furnished to the Horse Artillery. I have now come to the end of my argument, and I hope I have proved what I aimed at in the outset: 1st. The necessity there exists for a better horse, than that hitherto provided, being procured for the service of the Horse Artillery, by holding out to the Native dealers additional profit to induce them to bring a superior class of horses for that corps; 2dly that the generality of the common country horses are unfit for its ranks-that the present number of unquiet horses detracts from its efficiency, and that any plan by which that number can be diminished should be adopted; and 3rdly that capable stud horses would, on many accounts, add to that efficiency in the same ratio that the country horses take from it.

8. Perhaps I may not be deemed as travelling out of the intention of this letter (having already written so much about horses) if I shortly notice the regulation for distributing to the army, that part of the stud produce selected for officer's chargers. Its equity does not

certainly strike me as being very prominent. It is expressly avowed by Government that, in permitting a certain number of the 2nd class of the stud produce (for the 1st class is kept for private sale) to be set apart for officers, it is actuated only by the desire of affording to them the means of mounting themselves well and suitably. This excellent object is undoubtedly best attained by the stud horses; but it is surely to be expected that the boon would be held out to each corps in the same measure. I contend that it is not, and never has been The horses are sent to enable officers to mount themselves. In justice, then, should an equal number be sent to a regiment that has not above 16 officers with it, as to one that has upwards of 30? The Horse Artillery has 5 Field officers, 7 Captains, 28 Subalterns, 1 Surgeon, and 2 Assistants. From its consitution (with the exception of two Field officers at present) any officer belonging to it must, on accepting of any Staff employment, quit its ranks and return to the Foot Artillery, and the vacancies, so caused, are filled up by effective men from the latter department. The consequence of this arrangement is to insure the full complement of officers always to it. Now no such rule obtains in the Light Cavalry-once in it, always in it-and no officer is removed from that arm because he may be employed away from it. I will therefore allow that a Regiment of Cavalry has 20 officers, whose services may be available for it alone-I think it will be allowed I am arguing fairly enough-yet to this smaller body of officers is an equal number of "Officer's Chargers" sent, as to the greater body (averaging from 35 and upwards) attached to the Horse Artillery, and this too, as it is professed, " with a view of giving to the officers of the mounted part of the Army, an equal chance of providing themselves with chargers." We have reached, Sir, a new era in mathematics! 15 "Officer's Chargers" are sent to both Regiments, on the demonstrable principle, that 15 is to 20 as 15 to 35!!! What need I say more?

I am, Sir,

Your obedient servant,

A HORSE ARTILLERYMAN.

Meerut, 17th May, 1823.

ARTICLE III. °

On Monthly Musters &c.

To the Editor of the British Indian Military Repository.

Mr. Editor,

Perhaps you may find room in your very useful work for the following observations and remarks.

On the Madras side of India, a public Muster of the troops and establishments is now only taken every three months; Commandants of corps taking their own Musters on the 1st of each intermediate month.

There are few who have not had occasion, at one time or other, to remark upon the great pressure of public business in the Military Auditor General's office.

Suppose, therefore, by way of an improvement on the Madras plan, the following arrangment was sanctioned by authority. Query whether it would not be found to relieve individuals, paymasters, and the Auditor General, from a great weight of what appears rather unnecessary trouble.

Let the Muster of all troops, cattle, and establishments, be taken in detail (same as is at present the practice) on the 1st day of August, November, February, and May only.

And on the 1st of each intermediate month—Let the Musters be taken with equal form and ceremony; but only an abstract of the Muster be given in from each troop, company, establishment, or department.

On the 1st of August, November, February, and May, quarterly pay abstracts to be made out agreeably to the detailed Muster rolls.

And on the first of each intermediate month—An abstract of the Muster, with a receipt on the back for the estimated amount due, should be sent into the Pay Office, and advanced (in the proper course of time) on account, to be afterwards deducted from the amount of the quarterly pay abstract.

In like manner the acquittance rolls, instead of being as they now are, made out monthly, might be reduced to quarterly ones.

By an arrangement of this nature, equal form and ceremony would be observed as at present, in the taking of a monthly muster.

The troops would be paid with the same regularity as they now are, and the business would be very considerably reduced to individuals, paymasters, and the Auditor General in particular.

Not being aware of any serious objection to such a measure, I have ventured to propose it through the means of your valuable work; and I shall endeavour to explain it more at large, by the form of muster rolls, and abstracts, as would then be required,

Subscribing myself, Sir,
Your obedient Servant,
A BENGAL OFFICER.

No. I.

Form of the 1st Quarterly Muster.

Battalion Regiment for the 1st Quarter of the year, 1823-4, taken at Attock 1st of August, 1823.

Company

Muster roll of the

RE	For May. 1823.	,	,	6	-
Remarks.	For June. 1823.				
	For July. 1923.		•		

No. II.

The Honourable Company Dr.

To abstract agreeably to Muster taken on the 1st of August, 1823, at Attock, for the 1st Quarter of the year 1833-4.

-		69.	Number.
Arreare.	Extra charges.	Subadar, Jemidar, Havildars, Naicks, Drummers, Sepoys,	Company Battalion Regiment Native Infantry. For May, June, and July, 1823.
			Tentage.
	:		Gratuity.
	:	, o o o o o o	Batta.
•		56 39 27 21 18 16.5	Pay.
	:	57 51 48 25	Total of
	<u>:</u>	25 57	Each.
	:	246 57 286 51 153	Total.
	246	2622	Grand Total.
			1

•

For the Paymaster.

No. 111:

•	202	
Sepoys.	55 8 11 3 15 11 3	₹
Огиттега.	61	61
Naicks,	es : es	5
Havildars.	2	5
Jemidar,		1
Subadar.	1 1 5 8 29 55 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
Lieutenant		1
Captain.	, p=4	-
Abstract of the Muster taken of the Company Battalion Regiment on the 1823, at	Effective the whole month, Sick, Command 30th May, Leave since 5th of February.	Total, 1 1 1 1 1

(Signed) E. F. Examined, C. D. Lieutenant and Adjutant.

(Signed) A. B.
Lieutenant,
In charge of the Company.

Lieutenant Colonel,

Commanding Battalion Regiment.

For the Paymaster.

Receipt on the back of the Abstract of the intermediate Musters.

RECEIVED from Captain G. Deputy Paymaster, the sum of Sicca Rupees Nine

Hundred and Fifty-six, Annas Eight, being the estimated account of pay and allowances due to the Company Buttalion Regiment, for May, 1823; to be deducted from my pay Abstract

for the first Quarter of the Year 1823-4.

(Signed) A. B.

Lieutenant,

In charge of the Company.

Sa. Rs. 956:8:0.

ARTICLE IV.

Synoptical Table of English and French Lineal Measures.

THE scientific reader will readily acknowledge the value of the present article, which has been kindly placed in our hands by Captain Enderby of his Majesty's 16th Lancers; the same having been lately prepared and published by a friend of that officer in England.

We trust at a future day to follow up this article by a comparative table of weights.

The officers of the Indian Armies serve under Governments ever ready to encourage the researches of science; and boundless is the field before them for observation in geological, geodætical, and astronomical science.

We trust the present table may be acceptable to many of our subscribers, and shall feel infinite gratification if it proves of use in assisting the calculations of those already engaged in extensive surveys.

To the readers of French Works of science in their original language, the value and use of this table is too obvious to require comment.

INTRODUCTION

TO A

SYNOPTICAL TABLE

OF

ENGLISH AND FRENCH LINEAL MEASURES.

A DESIRE to form a Table in which not only the French Measures of Length, but also a selection of corresponding English and French Measures, should be contiguously arranged, after having been freed from discrepancies, and so adjusted as to give complete results wherever it was possible, and where not, such near approximations as could readily be admitted within a moderate space, gave rise to an arrangement, from which the following is a selection.

It is presumed that a few preliminary remarks, particularly with respect to the comparative value of the Toise, Métre, Décimétre, Pied, and Ligne, will not be deemed irrelative: and as liberty has been taken, in a trifling degree, to alter the common mode of punctuating decimal digits, so as the more clearly to establish their value, it has been thought proper to subjoin what, it is hoped, will be received as a sufficient reason for a slight but useful deviation from the general practice of writers on this subject.

The length of 1 Métre in Pieds is stated by Brisson, (in page 16 of the monotype edition of his "Instruction sur les Mesures, &c." published at Paris in the 8th Year of the French Republic,) as being "exactement" = 3'078444 Pieds; and in the very same page he states the Décimétre as "exactement" = 44'3296. Lignes. Now as 10 Décimétres = 1 Métre.

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And as 12 Lignes = 1 Pouce. 443296. Lignes, × 12 | will 443296. Lignes | 443296. Lignes, × 12 | 369413 Pouces | And as 12 Pouces = 1 Pied. 369413 Pouces, × 12 | 30784 Pieds | 369413 Pouces
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remain a discrepancy of...0.0000004 parts of a Pied on each Métre and this discrepancy being multiplied by 100000000. the number of Métres in a quadrant,* will cause the whole discrepancy on that quadrant to be 4.4 Pieds.

S. A. Tarbé (in page 54 of his "Manuel Pratique et Elémentaire des Poids et Mesures, &c." published at Paris, in October 1813,) states the Quadrant, or fourth part of the terrestrial meridian, at the level of the sea, to be 5130740 °O. Toises; and adds, immediately after, that the 10000000 °O.th part of this number is = "3 Pieds, 11 Lignes, 296 Milliémes, or 443 296 Lignes:" but neither of these comparative values is correct, as will appear by the following calculation.

```
513074 O. Toises × 6 = 80784440 O. Pieds,
30784440 O. Pieds × 12 = 369413280 O. Pouçes, and
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369413280 0. Ponces × 12 = 4432959360 0. Lignes, and these being - 100000000 0.

will not quote but only 442-296. and this discrepancy reduced will produce 443-295936.

the same error as that of Brisson's above-mentioned. Tarbé, indeed, has not overlooked the discrepancy; and,

[•] In the Connoisance des Tems for the year 1823, page 241, it is stated that M. Delambre has found the "Quart du Meridien," to contain not 1000000000. Mêtres only, as above, but 100007230. Mêtres!

after stating the exact value of the Métre, in a note at the bottom of the same page, 54, he adds, that the difference is an imperceptible quantity, or one of which no account need be taken in ordinary calculations. Though Tarbé, in page 8 of the same work, has quoted the law of the 19th Frimaire, An. 8, as valid authority for the received length of the Métre, notwithstanding the admitted error of nearly 43 Pieds, which, as above shewn, it would produce in the Quadrant; the real value of the Métre, (443'295936. Lignes,) as it is exact as well as finite, and so preserves both the ascending and the descending reductions of the measures unvitiated, has been adopted in this Table.

Dr. T. Young, in his "Natural Philosophy," vol. ii. page 151, gives the Toise as equal to 76 736. Inches. The Pied, being 4th of the Toise, will therefore = 127893 Inches.

Again, as 1 Pied: 12'7893:: 3'078444. Pieds (= 1 Métre): 39'371246464. Inches.

These data and calculations being assumed as correct, $\begin{array}{l} 1 \; \left\{ \begin{array}{l} \text{Pied} \\ \text{Metre} \end{array} \right\} \text{ is entered in} \left\{ \begin{array}{l} = & 12.7893 \text{in.} = 1.0657 \text{ft.} \\ 3.078444. \; \text{Pieds} \\ 39.371246464. \; \text{Inches} \end{array} \right\}$ and not, as it is made in most, if not in all, comparative tables of English and French measures = 39'371. Inches only, which when carried no higher than to the Myriométre = 393710. Inches, in the Table would make it thereby occasioning a defect2'46464.In.:

it being evident, from the above operations, that the Myriométre $=393712\cdot46464$. In. should as stated in the Table.

or discrepancy of

Much confusion has arisen, particularly in discourses on political arithmetic, (where, as well as in many other works, intricacy in the extreme exists already,) from marking off certain portions of whole numbers by com-The evil is increased when the whole numbers are succeeded by fractional parts; more especially as many authors use the Comma for the decimal mark. Throughout this Table it is by the Point only, variously applied, that the digits, &c. of the decimals, in every compartment, are distinguished. It is always placed even with the top of the first digit of a decimal, and where the expression consists of whole numbers, though no fractional digits follow, it is thought expedient that a cypher should follow the point ('), and be terminated by a point after it at the bottom. If no whole numbers precede the decimal digits, it is best, where there is convenient room for the purpose, that they should be preceded by a cypher, with an intervening point placed even with its top, and consequently even with the top of the first succeeding decimal. Where the point is placed over each of any two digits, in the same compartment, it is to be understood that the digits under the points, with the digits between them, if any do intervene, form a circulating decimal. Where the pcint is placed over the last digit only, it denotes that the digit repeats. Where the point is placed after, and even with the bottom of any fractional number, it denotes that the decimal terminates, and that all the digits are entered in the table. Finally, where the point is not placed over, or after the last digit, or where an et catera (&c.) follows it, it is not to be inferred that the number is interminate, but merely that its termination or circulation is not within the limits of the Table, and that, when multiplied into any of the values of any given unit therein, it can only produce an approximating result.

The Chain of Units, which decrease in their value in their descent from left to right diagonally across the Table, contains such measures as have been selected from a great variety of others, under an impression that they would be found most generally useful. The name, or denomination, of each unit is placed in its own parallelogram, or rectangular compartment, immediately after the Unit, and not in the margin of the Table, or at the top of the perpendicular columns in which the units stand. By this arrangement each unit is found with equal facility; and its comparative values, whether in an ascending or descending direction, are more readily obtained. Thus, for example, if the Métre be compared with the Mile, it is seen, from their position in the Table, that the Mile is the greater: and then, from the figures in the angle of the upper Gnomon that 1609'296 &c. Métre = 1 Mile; as from those in the angle of the lower Gnowton that 0'000621 &c. parts of I Mile = I Métre.

The Calculator of the following work would be extremely sorry if it should be supposed by any one that he had been induced to publish it from a desire to expose the incorrectness of others. He assures the Reader that he has been actuated by no such unworthy motive. He is anxious that the two most powerful nations in the world, eminent above all others in arts, sciences, and arms, may hereafter, like the common offspring of the same Beneficent Parent, become more and more firmly united and linked together in the bonds of mutual good offices and esteem. His sole object, therefore, in laying this little Work before the

Public, has been to facilitate, at least in one respect, that intercourse in sciences and the arts between the two countries which their juxta position, and the community of their literary and commercial interests, if not thwarted and opposed, could not fail very widely to extend.

1821, Dec. 13.

ARTICLE V.

Remarks on the Clothing &c. &c. of the Bengal Native Infantry.

To the Editor of the British Indian Military Repository.

Sir,

The efficiency of the soldier, as well as his capability of performing with effect the duty required of him, must greatly depend on his being well equipped with every article necessary to preserve his health, and to render him as comfortable, as the nature of his duties will permit. I shall therefore offer no apology for submitting the following observations on, what I conceive, deficiencies in the clothing and equipment of our Native Infantry.

Although it must be acknowledged, that many improvements have been made during the last twelve years, in the appointments and clothing of the Native Infantry, it cannot be denied, that they are still far from perfect; and that no steps have been taken, for securing to this branch of the Army, a regular supply of great coats, may I think be attributed, from the known attention of Government to every point connected with the efficiency of the Army, to a supposition, that the climate was too mild to render them necessary: but when the cold at one period of the year, and the heavy rain at another, are taken into consideration, connected with the fact, that sentries are generally exposed at all sea-

sons without shelter of any kind, it must be allowed, that great coats are as necessary for the soldier in India, as in England.

The necessity of giving the Native soldier some other covering, in addition to his regimental coat and pantaloons, is indeed so generally felt by officer's serving with Native corps, that great coats made of country blankets, are often furnished by Commanding Officers of battalions, as half mounting.

These coats although extremely useful, are cumbersome and inconvenient; the men cannot pack and carry them on their backs, and they consequently add to the cattle, already too numerous, required for the carriage of the baggage. And as the furnishing of these coats is left entirely at the option of Commanding Officers, it happens not unfrequently, that many corps are without them; when the sentries, in bad weather, wrap themselves up in white linen sheets, in such a way as sometimes to be productive of evil consequences.

I would therefore suggest, that every non-commissioned Officer and private, borne on the strength of the Regular Infantry, should be supplied once in 5 or 6 years, with a great coat made of English woollen, similar in all respects, to those in use in His Majesty's Army. I think the Europe coat would last the above mentioned time as I know from experience, the blanket coats will, with care, last four years.

The most material point to be considered is, the expense that would be incurred in furnishing the coats here recommended, (as I imagine their superiority in every respect over those now in use, will be at once admitted). I have been at some pains to ascertain this, but, I confess, I am not fully satisfied, with the result of my

inquiries. I find in James's Regimental Companion, Vol ii Page 279, that the compensation for a serjeant's great coat was fixed at 12s. 6d., and for a private's 11s. Now taking these rates at two thirds, or half only of the actual cost, I do not think the expense can be urged as a valid objection to the measure here proposed.

A fund, to meet this expense, might be established by every officer receiving half mounting stoppages, paying to the clothing board such sum annually, for every man in his corps, as might be fixed by proper authority; and any sum due for great coats above the sum so funded, to be paid from the half mounting stoppage for the year in which the coat would be served out as half mounting.

Such a fund would, in the end, be advantageous to Commanding Officers of Battalions, to such at least as were anxious to have their men properly equipped, as it would obviate the possibility of their joining a corps that was deficient in an expensive article of equipment, which they might have served out to their former corps but a short time prior to their removal from it.

Great coats of the kind here recommended, could be rolled up, and carried on the knapsacks when marching, and at the back of the sepoy when on guard or standing sentry; and the advantages that would result from their adoption, to the appearance and comfort of the Native Soldier, require no comment.

Caps and knapsacks should also be served out at stated periods; and if the latter were reduced in size, it would be a great relief to the men. A knapsack calculated to hold two changes of linen, a pair of shoes, one or two cooking pots, with the small carpet on which the sepoy sleeps, would be found to answer every purpose;

and such knapsacks could be packed, and carried with greater ease to the men than those generally used.

Before I conclude I must say a few words respecting the regimental coats of the Native Infantry. I am fully aware that the cut or make of a regimental coat will be considered by many, a matter of no moment whatever: but as long as soldiers are clothed in uniform, I conceive that uniform should be made with reference to the appearance of the wearer; that the coats of the Bengal Native Infantry are lamentably deficient in this respect, I fear must be confessed, and that in nine cases out of ten, the sepoy seems to have a coat never intended for him. That this is owing to causes, over which the clothing agents have no controul, I can readily believe; and possibly it may be attributed, partly, to the preparation of the indents furnished from Battalions. However I have no intention of entering into this subject at present; I have merely taken this opportunity of alluding to it, in the hope, that under existing circumstances it may direct attention to this point, when I have no doubt, the defect complained of, will at once be remedied.

(Signed) AN ADJUTANT,

Beigal Native Infantry.

ADDITIONAL SUBSCRIBERS,

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His Excellency Sir ALEXANDER CAMPBELL, Bart. and K. C. B. Commander in Chief, Madras.

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l	Hall,	Captain	Artillery.
1	Jackson.	Lieutenant	Artillery.
1	Pennington,	Lieutenant Colonel	Commanding Horse Brigade.

REFERENCES TO PLATE XVII

- Tope taken possession of, and trenches made on the night of the 4th of January, 1805.
- First Breach stormed on the Evening of the 9th.
- C. Mortar Battery of four 8-inch and four 5\frac{1}{2}-inch.
- D. Batiery of six 18-pounders opened on the morning of the 71h
- Enemy's Trench and Guns. Г
- F Second Battery of four 18-pounders and two 24-pounders.
- G. Second Breach stormed on the 21st.
- II. Battery for two 12 pounders, (not used)
- I Two 6-pounders.
- K. Three 12-pounders.
- L. Two 12-pounders on a Sand Hill
- M. Parallel, &c.
- N. Third Breaching Battery of six 18-pounders
- O. Mortar Butteries, one 10, three 8, and four 51-inch.
- P. Advanced Trench.
- Q. Battery of two 12-pounders.
- R. Third Breach.
- S. Bastion attempted on the 20th and 21st of February.
- Enemy's Battery and Trench. T.
- Village post stormed by Captain"Grant, and 11 guns U. taken.
- V. Battery of two 12 pounders and two 54 Inch Howitzers.
- W. Large dry Tank, serving as a depôt.
- No. 1. 2. 3. 4. 5. refer to the Bastions mentioned in the Journal.

BRITISH INDIAN

Military Repository.

No. VI. JULY, 1824. Vol. III.,

ARTICLE I.

MILITARY LAW EXTRACTS.

(Absence of Witnesses.)

ON account of the absence of material witnesses the court may be moved to postpone a trial; but in the affidavit of the necessity, (of the propriety of which affidavit also the court is to judge,) it is to be shearn that the parties are material witnesses—that the party applying has not neglected to endeavour to procure their attendance—that there is reasonable expectation of his being able to procure their attendance at the time to which he prays delay,—it may be the affidavit of a Medical person, that the witness is unable to attend in court, and the same with regard to the Processor or Prisoner. M.L.E. p. 111.

The postponing a trial (says judge Forster) is not a matter of right, either when the application is made on the part of the Prisoner, or on the part of the Crown; for in either case the court in its discretion, even flough an affidavit be made, may refuse to grant the motion. McA. v. 2, p. 30.

Vol. III.

But before the court will consent to put off the trial on account of the absence of a material witness, it must be satisfied that injustice would be done by refusing the application, and that the party applying has not conducted himself unfairly, nor been the cause of any improper delay. P. E. p. 6.

Accomplices witnesses.

It has been before mentioned, that unless conviction and judgment are proved, a witness is not incompetent from infamy of character, though he may confess himself guilty of an infamous crime. Nor is it a sufficient objection to his competence, that he has been an accomplice in guilt with the Prisoner at the bar. The evidence of accomplices has at all times been admitted from a principle of public policy, as it is scarcely possible to detect conspiracies and many of the worst crimes without their information. But such testimony ought to be received by a jury with considerable caution and distrust: for on their own confession they stand contaminated with guilt, and in the hope of lessening their own infamy, will often be tempted to throw as much guilt as possible upon the Prisoner; they may also in some cases be entitled to rewards on the Prisoner's conviction, and in all cases expect to earn a pardon, and as fear is usually their motive, the same feeling may tempt them to exaggerate their evidence, for the purpose of destroying their former associate, and securing themselves against his vengeance. P.E. p. 21.

The general rule is, that a person who confesses himself ghilty of a crime is a competent witness against his partners in guilt. Thus if two or more persons are accomplices, one who is not indicted may be witness against the others, though he may have a promise of pardon or reward on condition of giving evidence against the Prisoner, so he may after conviction, if judgment has not passed upon him: for it is not the conviction, but the judgment that creates the disability. So where several persons are indicted separately on the trial of one, the others who have not been convicted, may be witnesses in his behalf. P.E. p. 23.

Since accomplices are competent witnesses, it necessarily follows, that if their evidence is believed by a jury, a Prisoner may be legally convicted on it, though it be unsupported by other proof. The practice however is to advise the jury to regard the evidence of an accomplice, only so far as he may be confirmed in some part of his testimony, by unimpeachable testimony. P.E. p. 24.

Appeal.

It is competent moreover for either of the parties in the appeal to adduce additional evidence, either by the examination of new witnesses, or the production of writings. M.L.E. p. 91.

The above opinion confirmed. Tytler, p. 338, Chap-VIII.

• Form in appeal cases.

The appellant sustains in conjunction with the Judge Advocate, the part of Prosecutor, and the party in whose favour the inferior court has given its judgment, is Defendant in the cause.

The evidences are sworn; they must answer all pertinent interrogatories, either in the way of primary or cross examination.

It is competent moreover for either of the parties in the appeal to adduce additional evidence. Tytler, p. 338, Chap. VIII.

The only limitation of this right of appeal, arises from the constitution of all General Courts Martial.

Right of Appeal.

They are not subsisting Courts of Judicature, open at all times, and to all parties, but being assembled at the discretion of the chief Military authority, that power must judge of the propriety of appeal, except in one instance of an inferior officer, non-commanding officer, or soldier, who conceives himself to be wronged by his Captain, or other officer commanding the troops or company to which he belongs. 2nd Article, 12th section, gives a right to demand a Regimental Court Martial, and thinking himself still aggrieved, an appeal to a General Court Martial is punishable, if upon a second hearing they find the appeal vexatious and groundless. Tytler, p. 332 and 4, Chap. VIII.

The form observed in appeal cases, as stated above, renders the trial a sort of civil suit, and seems inconvenient, from the words of the oath administered to the court, "to try between the King and Prisoner:" (here there is none) the oath to the witnesses is therefore rendered null.

Arraignment.

After the Prisoner had been arraigned, he may either 1st, stand mute, that is, refuse to answer, or he may answer foreign to the purpose.

2ndly, He may confess the fact of which he stands accused.

3rdly, He may admit the act charged, but plead in justification or mitigation, or he may plead not guilty to the charge.

1st, Should the Prisoner stand mute from perverseness and deliberate design, or answer impertinently, or foreign to the purpose, the court will in the first instance endeavour to overcome his obstinacy, by wisely admonishing him of the dreadful consequences which await him. If these admonitions fail to have the desired effect, the court must necessarily proceed to pass sertence or give judgment, in the same manner as if he had been regularly found guilty on the most positive evidence.

2ndly, Should the Prisoner on being arraigned, plainly and explicitly confess the crime with which he is charged, nothing remains for the court, but to proceed to the painful duty of pronouncing judgment. In such case humanity will plead strongly in behalf of the Prisoner for a mitigation of the sentence. McA. vol. 2, p. 25.

Upon a simple and plain confession, the court has nothing to do but to award judgment; but it is usually very backward in receiving, and recording such confession, out of tenderness to the life of the subject; and will generally advise the Prisoner to retract it, and plead to the indictment. B. C. vol. 4th, p. 329.

Arresta

On putting the commanding officer under arrest, the Prince Regent has been further pleased to command it to be signified, that though the observations of the court upon the nature of Lieutenant Colonel H.'s arrest are no doubt founded upon the best motives, yet it is impossible to let them go forth to the army without

explaining that the court are in error when they suppose that circumstances may not occur, even upon a parade, to justify a junior officer in taking upon himself the strong responsibility of placing his commander in arrest. Such a measure must alone rest upon the responsibility of the officer who adopts it, and there are cases wherein the discipline and welfare of the service require that it should be assumed. In the present instance, the sentence of the court appears to afford a full justification of Captain Elligoad's conduct, in the placing of Lieutenant Colonel H. in arrest, though it would have been more regular if that officer had continued to rest upon his own responsibility, without calling a meeting of his brother officers to support it by their opinion. H.C.B. p. 292.

A General Court Martial setting, has power to put any officer interrupting their proceedings, or treating them with contempt, under arrest, even though the officer so offending be senior to the President. Sam. p. 633.

No officer can refuse to be released from arrest; his remedy for unjust arrest is afterwards open to him, if preferred in a proper manner, for which provision is made by a special article of war. Sam. p. 640.

Articles of War.

"Since the year 1815 The Honourable East India Company's European officers have been tried by the annual articles of war, in consequence of the opinion of his Majesty's Law officers, that they are, in virtue of having King's commissions, signed by the Commander in Chief in India, amenable to them." H.C.B. p. 12.

At present (May 1822) the article of 27th George IInd has been reverted to, by order of the Commander

in Chief. The Judge Advocate General has been sent to England, and no doubt this will be noticed—" Misera est servetus ubi jus est vagum aut incognitum."

· Challenge of Members.

But upon the principle that members of a Court Martial are both judges of the law, and of the fact, and as such are to be considered in the double and compound capacity of judges and jurors, and as amenable to the laws of their country for any flagrant partiality or illegality in their proceedings, they ought to be extremely delicate and cautious of rejecting any challenges or objections made by a Prisoner previous to the court's being sworn, without first admitting him to shew cause; because upon a consideration of the reasons assigned in the challenge, if they be not sufficiently valid, a majority in opinion may always over-rule the challenge, and afterwards proceed on the trial. Although it be the daily practice in our criminal courts to allow a Prisoner a right of peremptory challenge, that is, objecting to jurymen to a certain number, without assigning cause, yet the constitution of Naval or Military Courts Martial cannot admit of the exercise of similar privileges. If a Prisoner to be tried at a Naval or Military Court Martial, challenge any member of the court, he should immediately assign cause for such a challenge; the court will judge of the validity, and in their discretion admit or reject it. McA. vol. 1st, p. 268.

Lieutenant Colonel Bell's trial.

I.A. Do you object to any of the members of the Court?—

I object to Lieutenant Colonel Adams for the following reasons: In the first place, that officer is summoned as a material witness on the part of the prosecution; it is not contended that where a question of fact incidentally arises on a trial which lies within the knowledge of one of the members of the court, that the mere circumstance of his being a member disqualifies him from being a witness. But this rule cannot be extended to principal or leading evidences without infinite inconvenience. Rendering all homage to the impartiality and honour of Lieutenant Colonel Adams, yet being a witness of whose testimony the credibility is to be determined by the greater or less degree of corroboration it receives from other witnesses, on the part of the prosecution there must, from the infirmity of the human mind, be a slight bias on his feelings, that may incline him to believe the evidence which supports his own, rather than that which contradicts it.

In the second place, the Prisoner proposes his objections to Lieutenant Colonel Adams, on the grounds of his having been actively employed in the unhappy affair of the 11th of August, and this objection he proposes rather as an appeal to the delicacy of that officer, than as any doubt of his honour and rectitude. If Lieutenant Colonel Adams does not admit the force of it, the Prisoner consents to withdraw it.

The court cleared.

The court opened again.

The court having considered the above objection, having admitted the validity of it, and Lieutenant Colonel Adams is directed to withdraw. H.C.B. p. 718.

Character.

It has been heretofore held in criminal courts, that a Prisoner cannot examine to character, except in favorem

vitæ when charged on a capital indictment; but the rule is now wisely extended to all misdemeanors. McA. vol. 2nd, p. 90.

In giving general character in favour of a Prisoner on trial, the witness may assign in evidence the reasons on which he gives that character. McA. vol. 2, p. 90.

Lord Kenyon says, "affectionate and warm evidence of character, when collected together, should make a strong impression in favour of a Prisoner, and when those who give such character in evidence are entitled to credit, their testimony should have great weight with the jury." McA. vol. 2, p. 92.

In charges that attach to an officer's character, if they have been known to the corps, and the officers have nevertheless associated with the Prisoner, or without remonstrance mixed in duty with him, "I conceive," (says Sir Charles Gould, page 9) "this circumstance will, and ought to diminish the weight of the accusation." M.L.E. p. 163.

In trials for felony the Prisoner is always permitted to call witnesses to his general character, and when the evidence against him is doubtful, such testimony may be sufficient to warrant an acquittal; the same rule seems to apply with equal force to trials for misdemeanors, where the direct object of the prosecution is to punish the offence. P.E. p. 72.

Charges.

The particular facts charged, and in what manner committed, with the time and place, are directed to be clearly specified in all complaints for bringing offenders to trial by Courts Martial, upon similar principles as is directed by courts of Law in all indictments. McA. vol. 2nd, p. 5.

Dates.

But as the crime charged may have been committed, and yet there may be a mistake or doubt as to the precise day, the consequence of such a mistake may be guarded against by adding, "or on the day or days immediately preceding, or on the day or days immediately following." The greatest possible caution however is to be adopted in using this latitude. McA. vol. 2nd, p. 6.

Misnomer.

It is also necessary, that in all accusations the name, surname, rank or station, and the regiment to which the offender may belong, should be clearly specified. Should a misnomer, through hurry or inadvertency have taken place, and that it is discovered on assembling the Court Martial for his trial, by its discordance with the muster books or otherwise; it is usual to keep the Prisoner under arrest, and after the charges have been preferred anew, with his name correctly specified, a Court Martial may afterwards assemble for his trial on the specific charges originally brought against him. McA. vol. 2nd, p. 8.

Misdate.

In this place it may be proper to remark, that if a Prisoner be tried for a crime said to have been committed on any particular day of the month, and that in the course of trial it is proved to have happened on a day different to what the indictment or accusation set forth, it is incumbent on the Court Martial to acquit him; and he is not liable to be tried a second time for the same offence. McA. vol. 2, p. 160.

To be exhausted.

A Court Martial must exhaust the whole charges that come before them, either by separate opinion, or judgment upon each separate article, or where the several charges are connected and form altogether one offence, by a sentence referring to the whole. Tytler, p. 144.

Irrelevant.

The necessity of examining and discussing the whole articles of charge which are brought before a Court Martial, does not preclude their exercise of judgment on the relevancy or irrelevancy of those charges, or on their competency to become the subject of trial.

It frequently happens when charges are brought by a private prosecutor, involving the consideration of various articles of alleged misconduct or malversation, that the prosecutor, either from over auxiety or error in judgment, specifies certain matters as articles of charge, which a Court Martial may judge to be of a nature entirely blameless, and that although proved or acknowledged by the Prisoner, they infer no criminality. In such a case it is the duty of the court to dismiss those particular articles of the charge altogether, and throw them out of their consideration as irrelevant. Tytler, p. 147.

How Laid.

In whatever terms the accusation in the charges may be conceived, it is necessary 1st, that the crime or offence be clearly specified and expressed, and the act or acts of guilt pointedly charged against the Prisoner; 2ndly, that the time and place, when and where the crime was committed, be set forth with all possible certainty and precision.

As all crimes admit of certain degrees and modifications of guilt, it is essentially necessary, to the ends of justice, that any Prisoner who is to undergo trial for a crime, should be apprized of the extent, and degree of guilt with which he stands charged; and of the particular facts of which the prosecutor means to bring evidence against him, in order that he may have a fair opportunity of invalidating the proof of those facts by contrary evidence.

Thus, if the crime is mutiny, it is not sufficient that the charges bear, that A. B. is guilty of mutiny; the particular acts of mutinous conduct in the Prisoner must be clearly and distinctly enumerated: as, entering forcibly with arms into a guard house, and releasing a Prisoner—using certain traitorous words against his Majesty &c. There must (says Judge Hawkins) be a certainty of the offence committed, and nothing material shall be taken by intendment or implication, but the special manner of the whole fact ought to be set forth with certainty. Tytler, p. 211.

The immediate cause of disapproval of the above sentence, is its illegality, arising in the first place from the oversight of the person who drew out the first and second charges, and who by the omission of the phrase, "Knowing them to be stolen," after the specification of the articles sold, took from the act its criminality, civil or military.

Charges were for offering stolen articles for sale. H. C.B. p. 619.

Including several persons.

A person involved in the same criminal charge with others, but not affected by the evidence for the prosecu-

tion, may be immediately acquitted, and admitted as an evidence in favour of the others. An unsettled difficulty however occurs in regard to the acquittal, which must first take place to rid the unconnected person of his connection with the other Prisoners. McA. vol. 2nd, p. 125.

In Courts Martial, this (acquittal) would seem to require a completion of the proceedings as regards the individual, and waiting their confirmation by the proper authority, previous to continuing the trial of the remaining parties. M.L.E. p. 118.

The practice of including several Prisoners in one charge, (not often done,) seems highly objectionable; as it deprives each Prisoner of the testimony of all the others; and it is monstrous to suppose that men would perjure themselves to avoid perhaps a slight punishment. The inconveniences above quoted are also avoided by separate charges.

Confession.

Since an admission is evidence against a party in civil suits, with much stronger reasons is the voluntary confession of a Prisoner evidence against him on a criminal prosecution: for it is not to be conceived that a man would be induced to make a free confession of guilt, so contrary to the feelings and principles of human nature, if the facts confessed were not true. The general rule on this subject was very fully considered in a judgment delivered by Mr. I. Grose, on a case reserved for the opinion of the Twelve Judges; and it seems to be now clearly established, that a free and voluntary confession, by a Prisoner accused of an offence, whether made before his apprehension or after, whether on a

judicial examination or after commitment, whether reduced into writing or not; in short, that any voluntary confession made by a Prisoner to any person, and at any time or place, is strong evidence against him, and if satisfactorily proved, is sufficient to convict without any corroborating circumstances. But the confession must be voluntary, not obtained by improper influence, nor drawn from the Prisoner by means of a threat or promise: for however slight the promise or threat may have been, a confession so obtained cannot be received in evidence, on account of the uncertainty and doubt whether it was not made rather from a motive of fear, or of interest, than from a sense of guilt.

In Lumly's case, before mentioned, the question for the opinion of the Judges was, whether a written examination, taken by a committing magistrate, and containing a confession which the Prisoner on hearing read over to him, admitted to be true, but refused to sign, ought to have been received in evidence, as it was not signed either by the magistrate or by the Prisoner; and a majority of the Judges held that such a confession would have been evidence at common law, and that it is not rendered inadmissible by any provision in the statutes of Philip and Mary, respecting examinations and informations before Justices of the peace. If a Prisoner's confession, even when not reduced into writing, be evidence against him, a fortiori, it must be admissible when taken down in writing; for the fact confessed, being thus rendered less doubtful, is of course entitled to the greater credit, and it would be absurd to say that an instrument is invalidated, by a circumstance which gives it additional strength and authenticity.

Information not on Oath.

The informations against the Prisoner are to be taken on oath; the examination of the Prisoner ought to be without oath, and whenever a confession is given in evidence, the whole of what has been confessed, must be taken together: but if only the material parts of the confession be taken down in writing, and they are afterwards read over in the presence of the Prisoner, and admitted by him to be true, that admission will make them evidence. The confession is evidence only against the person confessing, not against others, although they are proved to be his accomplices.

Confessions improperly obtained.

It has been determined by all the Judges, that although confessions improperly obtained, are not admissible, yet that any facts which have been brought to light in consequence of such confessions, may be properly received in evidence. Thus, where a Prisoner was charged as accessary after the fact, with having received property knowing it to have been stolen, proof was admitted of the property being found concealed in the Prisoner's lodgings, although the knowledge of that fact had been gained from an inadmissible confession.

Facts arising out of Confession.

On a prosecution for receiving stolen goods, evidence has been admitted, that the Prisoner described the place where the goods were concealed, and that afterwards they had been found there; but that part of the confession in which he acknowledged that he himself had concealed them, must be rejected, as it was improperly drawn-from him. There is good reason for this distinc-

tion, for what the Prisoner has said respecting the concealment of the property, is ascertained to be true (by the fact of discovery) but the other part of the confession, in which he charges himself with having concealed it, may have been made untruely, and entirely under the influence of the threat or promise. P.E. p. 49 to 52.

Counsel.

It is likewise the practice of Courts Martial to indulge the Prisoner with counsel, or at least amicæ curiæ, (or friends of the court), who may stand or sit near him, and instruct him what questions to ask the witnesses, with respect to matters of fact. McA. vol. 2nd, p. 42.

By law, Prisoners are not allowed counsel in capital cases. The judges themselves are so sensible of this defect, that they never scruple to allow a Prisoner counsel to instruct him what questions to ask, or even to ask questions for him with respect to matters of fact: for as to matters of law, arising on the trial, they are entitled to the assistance of counsel.

Persons liable to Courts Martial.

Spies and aliens, committing what would be treason in a subject, are from custom liable to trial by a Court Martial. Tytler, p. 123.

Regimental and Garrison Courts Martial, being competent only to the trial of the lesser offences, or crimes which do not infer a capital punishment. Tytler, p. 179.

Of swearing in the Court.

When the several Prisoners to be tried are named on the warrant under which the Court Martial is held, and the matter objected to, each Prisoner respectively is also specified. I conceive the president and members may be sworn once for all, to try and determine the several matters before them, and the general practice countenances this; but when the warrant is general, not pointing out the Prisoners or the charges, I hold it to be necessary that the court should be sworn afresh for each trial. Remarks on Tytler, by Sir C.M.

Authority required for Punishment beyond, 300 Lashes.

No punishment awarded by a regimental or other inferior Court Martial, which shall exceed 300 lashes, is ever to be carried into execution, until approved by the General or other officer commanding the division. H. C.B. p. 392.

Forms of procedure at General Courts Martial.

The members being seated to the right and left of the the president, according to seniority, and the Judge Advocate facing him at the opposite side of the table, the president is to cause the party accused to be brought into court, and the witnesses, as well in support of the prosecution, as in the Prisoner's defence, and every other person who may choose, being admitted; the Judge Advocate, standing up, reads audibly the order for assembling the court, and likewise the order or warrant for his own appointment, and also the president's warrant; he then calls over the names of the president and members who have arranged themselves alternately on the right and left of the president, and administers to the president and members the oath prescribed by Act of Parliament, (having previously asked the Prisoner whether he objects to any members). The president then administers the customary oath of secrecy to the Vol. 111.

C

Judge Advocate. The court being now constituted, the Judge Advocate reads the charges against the Prisoner. The president of the court should then ask the Prisoner whether he is guilty of the accusation. The Prisoner having pleaded, all the witnesses present in court are ordered to withdraw. McA. vol. 2nd, p. 28.

Credit of Witnesses.

The credit of a witness can only be impeached by general accounts of his character and reputation; not by proofs of particular ctimes of which he never was convicted: and therefore it has been repeatedly ruled, that when a witness is impeached in character by the testimony of other witnesses called for that purpose, the first question must go to show whether the party impeaching be acquainted with the general character of the other witnesses, and if he answers in the affirmative, he may then be asked whether such witness be a person deserving credit in a court of Justice, upon his oath. It is also a general rule, that a party shall never be permitted to bring general evidence to discredit his own witness.

But if a witness proves facts in a cause which make against the party who calls him, the party may adduce other witnesses to disprove his testimony in those particulars. McA. vol. 2nd, p. 92

The only method of supporting an objection to such witnesses as are infamous, is to prove it immediately in court, by the record of conviction or otherwise: for no question can be put to a witness to criminate himself, or that may in any way tend to prove his own infamy. McA. vol. 2nd, p. 107.

Credit of Witnesses how impeached.

There are several ways of impeaching the credit of witnesses:—

1st, The party against whom the witness is called, may examine other witnesses as to his own general character, but they will not be allowed to speak to particular facts or parts of his conduct: for though every man is supposed to be capable of supporting the one, it is not likely he should be prepared to answer the other without notice, and even if he should happen to be prepared to defend himself, such evidence would generally afford a very slight and imperfect test of his credibility. The general mode is, to inquire whether they have the means of knowing the former witnesses' general character, and whether from such knowledge they believe him on his oath. In answer to such evidence against character, the other party may cross examine the witnesses as to their means of knowledge, or may attach their general character, and by fresh evidence support the character of their own witnesses.

2ndly, Witnesses may be called to impeach his credit respecting any matter relative to the issue; or lastly, it may be proved that he has made statements out of court on the same subject, contrary to what he swears at the trial. J.E. p. 106.

A party cannot impeach their own Witnesses.

A party will not be permitted to produce general evidence to discredit his own witness. "This," says Mr. J. Buller, "would enable him to destroy his own witness, if he spoke against him, and to make him agood witness if he spoke for him, with the means in his hand of destroying his credit if he spoke against him. The mean-

ing of this rule is, that a party cannot prove his own witness to be of such a general bad character as would make him unworthy of credit. If he knew the infamy of his character, he was practising a fraud upon the court in producing him as a witness; but if a witness unexpectedly gives evidence against the party that called him, another witness may be brought to contradict him, or to prove the facts otherwise. P.E. p. 110.

Deserters not re-enrolled.

G.O.C.C. 6th, October, 1817.

The practice which has hither to prevailed in the army, of enrolling and drawing arrears of pay for deserters who have been apprehended, previously to bringing them before a Court Martial for the trial of their offence, appearing to be founded on erroneous principles, it is hereby declared that a soldier deserting, or absenting himself from his corps without leave, is liable on conviction to all the penalties of his crime, without any necessity for the formality of re-enrollment; it being obvious that no military retainer can by his own act alone, or without the previous consent or permission of the authorities constituted over him by the state, cancel the obligation he voluntarily embraced, on his oath, on his first entering the service, and consequently as a deserter he is still amenable to the Martial Law.

It is moreover declared that the act of desertion cancels every claim that a soldier may have on the service, at the moment of quitting his corps, and that no arrears of pay, clothing, or any other allowance whatever can be drawn on his account. When any soldier who may have been struck off, as deserted, shall return to his corps, or be apprehended and sent to it, the circum-

stance shall be duly reported to the officer commanding the division, in which the corps is serving, who will use his discretion in either commanding him to be re-admitted on the strength of the corps, or in bringing him to trial before a Regimental or General Court Martial, as he may deem the case deserving, reporting his proceedings to the Adjutant General of the army, for the approval of the Commander in Chief.

Subsistence.

Subsistence will be furnished to deserters from the date of their being apprehended by the commissariat, on an order to that effect from the commanding officer of the station, at the following rates:

To European deserters a full ration of meat and bread, but no rum in cantoments, and no equivalent in money when marching.

To native deserters, two annas per diem.

The admission on the strength of corps, of soldiers who had deserted, or who had been struck off from whatever cause, must invariably receive the sanction of the Commander in Chief, before the act can be deemed valid, or can entitle the parties to be drawn for in abstract of their corps; on all such occasions the pay and audit department should have authentic notice of the re-admission so confirmed, tacked to the first abstract in which the men are drawn for. H.C.B. p. 121.

Deserters acquitted.

The fact appears substantiated by the evidence of the Town Major, that Annesley was enlisted specifically for the Artillery, and that he was, without his own consent, turned over to the Infantry. As the Prisoner cannot be considered as violating an engagement to which he never assented, I therefore direct him to be freed from the charge, and to be sent to the corps of Artillery. H.C.B. p. 71.

(Signed) HASTINGS.

Refusing to do duty with an officer not in Society.

Extract of a letter from Lord Cornwallis.

"You will therefore be pleased to give the most explicit caution upon the subject to the officers serving under the presidency of Fort St. George, by calling to their recollection, that although Military officers are, in common with other gentlemen, at liberty to make choice of their companions for private society, and may prefer charges if they think proper against an officer for improper conduct, yet that they cannot refuse to do public duty with an officer, who is not under some legal and known disqualification to exercise the rights and privileges of his rank, without exposing themselves to the penalties which must follow so evident and direct a breach of the articles of war. H.C.B. p. 212.

General Rules or Evidence.

If no objection is made to the competency of a witness, and he is allowed to give evidence, the next question is, what evidence ought to be given, and in what manner a witness is to be examined? It will therefore be now necessary to inquire into certain general rules which have been established for the purpose of directing the testimony of witnesses. Those which appear to be of the most extensive application are the following, viz.

1st, Evidence must be confined to the points in issue.

2nd, The affirmation of the issue to be proved.

3rd, The substance of the issue need be proved.

4th, The best evidence is to be given which the nature of the case admits.

5th, Hearsay evidence is not admissible.

In an action for a libel, imputing a crime to the plaintiff, in consequence of which he complained of having lost the society of his acquaintance, the defendant, on the general issue, was allowed to shew in mitigation of damages, that before and at the time of the publication of the supposed libel, the plaintiff was generally suspected of the crime imputed to him, and that on account of this suspicion his acquaintance had ceased to associate with him. B.C. p. 69.

And in an action for a malicious prosecution, the defendant after proving circumstances of suspicion against the plaintiff, may give evidence of his general bad character, in order to shew that he had probable cause for instituting the prosecution. P.E. p. 72.

2ndly, The affirmation of the issue to be proved, where one party charges another with a culpable amission or breach of duty, the general rule above laid down does not apply.

In such a case, the person who makes the charge is bound to prove it, though it may involve a negative, for it is one of the first principles of justice not to presume that a person has acted illegally, till the contrary is proved. P.E. p. 73.

4th, The best evidence must be given of which the nature of the thing is capable. The true meaning of this is, not that courts of law require the strongest pos-

sible assurance of the matter in question, but that no evidence shall be given which from the nature of the thing, supposes still greater evidence behind, in the party's possession or power; for such evidence is altogether insufficient, and proves nothing; but carries with it a presumption contrary to the intention for which it is produced.

Thus if a man offer a copy of a deed or will, where he is able to produce the original, this raises a presumption that there is something in the deed or will, which, if produced, would make against the party, and therefore the copy in such case is not evidence.

But if he prove the original deed or will to be in the hands of the adverse party, or destroyed without his default, a copy will be admitted; because then such copy is the best evidence. P.E. p. 75.

It has been already observed, that although the best evidence is to be given which the nature of the case admits, yet the strongest possible assurance is not required. If a deed, for example, is attested by several subscribing witnesses, the execution may be proved by one of them; or if none of these witnesses can be produced, proof of the signature of one witness will be sufficient for the proof, being, as far as it goes, complete and not inferior in its kind to any that can be produced; nor can it be inferred merely from the absence of further proof of the same kind, that such additional proof would be inconsistent with that already produced. P.E. p. 76.

Upon the same principle it will not be necessary to call the supposed writer of an instrument, for the purpose of proving or disproving his hand-writing, but the evidence of persons well acquainted with the character

of his writing will be sufficient. Such evidence is not in its nature inferior or secondary, and though it may generally be true that a writer is best acquainted with his hand-writing, yet his knowledge is acquired precisely by the same means as the knowledge of other persons who have been in the habit of seeing him write, and differs not so much in kind as in degree.

The testimony of such persons therefore, is not of an inferior or secondary species, nor does it give any reason to suspect, as in the case where primary evidence is withheld, that the fact to which they speak is not true. P.E. p. 77.

The rule which requires the best evidence to be produced is dispensed with in some particular cases.

When it is necessary to prove an entry in a public book, the original need not be shewn; but for the convenience of the public, a sworn copy will be admitted.

5th, Hearsay is not evidence. The general rule is, that hearsay is not admissible evidence; in other words, that witnesses cannot be examined as to what they have heard others say, for two reasons; first, because the original asserter of the fact ought to be produced, that the opposite party may have an opportunity of cross examination; but principally, because evidence is to be given under the sanction of an oath legally administered, and in a judicial proceeding between the parties affected by it, or between those who stand in priority of estate or interest with them, and although a witness may swear he heard the first statement made, it is still nothing more than a bare assertion without oath, and therefore not entitled to credit in a court of Justice.

The principle is applicable to statements in writing, no less than to words spoken—whether spoken or writ-

ten they are equally inadmissible in evidence. The only difference between them is, that there is a greater facility of proof in the one case, than in the other. A written account is proved to be genuine, by proof of the hand writing, but the genuineness of mere cral declarations must depend upon the memory and accuracy of the witness who professes to repeat them. P.E. p. 80.

A deposition not admissible.

For a deposition, (continues Mr. J. Lawrence), is the answer of a witness to such interrogatories as a litigating party suggests, for the purpose of establishing certain facts, and is considered to be a partial representation, as against all persons who have no opportunity of drawing out the whole truth by cross-examination; on this account it ought not to be received as evidence against a stranger. P.E. p. 85.

Dying Declarations.

The dying declarations of a person who has received a mortal injury, are constantly admitted in criminal prosecutions, and are not liable to the common objection against hearsay evidence. The principle of this exception to the general rule, is founded partly on the awful situation of the dying person, which is to be considered as powerful over his conscience as the obligation of an oath; and partly on a supposed absence of interest on the verge of the next world, which dispenses with the necessity of cross-examination. But before such declarations can be admitted in evidence against a Prisoner, it must be satisfactorily proved, that the diseased at the time of making them was conscious of his danger, and had given up all hope of recovery. And this conscious-

ness of approaching death may be collected, either from the circumstances of the case, (as from the nature of the wound and state of the body, or from the expressions used by the diseased) and it is to be determined from a consideration of all the circumstances of the case, not from any opinion of the medical person who attended.

On the same principle the dying declarations of an accomplice may be admitted. The declarations of a crimmal at the time of his execution, cannot be received on the trial of an accomplice, for after attainder he could not be a witness upon oath.

As the declarations of a dying man are admitted, it seems to follow that the party against whom they are produced in evidence, may enter into particulars of his behaviour in his last moments, or may be allowed to shew that the diseased was of such a character as was likely to be impressed by a religious sense of his approaching dissolution.

Hearsay is often admitted by way of inducement or illustration of what is properly evidence. Thus when an act has been done, to which it is necessary to ascribe a motive, what the person has said at the time, is clearly admissible for the purpose of explaining the act.

In an action for criminal conversation, the declarations of a wife at the time of her elopement, stating the reason of her eloping, may be evidence against her husband, as that she fled from an immediate fear of personal violence. P.E. p. 100 to 102.

Of Opinion.

In general the opinion of a witness is not evidence; he must speak to facts. But on questions of science or trade, or others of the same kind, persons of skill may speak, not only to facts, but are allowed also to give their opinion in evidence.

Of Belief.

A witness may not perhaps be able to swear to a particular fact, yet if he believed that the fact happened, such belief will in some cases be evidence. Thus, for example, a subscribing witness to a bond, may swear that he has totally forgot that he subscribed his name to it as a witness, and that he cannot swear positively that he saw the obliger seal and deliver the bond, but seeing his own hand-writing subscribed, as witnessing the execution, he may swear that he believes he saw the obliger execute the bond, and such answer will be satisfactory to the court. P.E. 107.

From Gelbert's Law of Evidence.

Positive evidence must always outweigh that which is negative: for the former being the result of attention and observation of the fact, can never be outweighed by that which may have arisen merely from the want of such attention and observation. Tytler, 26.

Depositions or Informations.

It seems now to be settled, that the depositions of a witness taken upon oath, in the presence of a Prisoner who has been brought before a magistrate on a charge of felony, may be given in evidence on the trial of an indictment for the same felony, if it be proved on oath, to the satisfaction of the court, that the informant is dead, or not able to travel, or that he is kept away by the means and contrivance of the Prisoner; provided also that the depositions offered in evidence are proved

to be the same as were sworn before the justice without any alteration. Before the statute of Philip and Mary they would not have been received, even though the witness had died.

It is not essential to the validity of the depositions, that they shall be signed by the deceased witness.

The information of witnesses taken before a justice of the peace cannot be given in evidence on an indictment for a misdemeanor, or in civil actions.

Nor for petit treason, however, as a Prisoner may be convicted of murder on an indictment for petit treason, the depositions are admissible to support a conviction of murder. P.E. 163.

As informations when regularly and judiciously taken, are evidence against a Prisoner, if the informant dies before the trial; as, on the other hand, where the informant himself gives evidence, the informations may be used on the part of the Prisoner to contradict his testimony, one of the objects of the statute was to allow the judge and jury, before whom the Prisoner is tried, to see whether the witnesses at the trial are consistent with the account given by them before the committing magistrate. P.E. 164.

Written Instruments

If a party intend to use a deed, or any other written instrument in evidence, he ought to produce the original, if he has it in his possession; but if the instrument is in the possession of the adverse party, who refuses to produce it after a reasonable notice, or if the original be lost or destroyed, secondary evidence, which is the best that the nature of the case admits of, will in that case be allowed. The party after proving any of these cir-

cumstances, to account for the absence of the original, may read a counterpart, or if there is no counterpart, an examined copy, or if there should be no examined copy, he may give parole evidence of the contents. P.E. p. 225.

The simplest and most obvious proof of hand-writing, is the testimony of witness who saw the paper or signature actually written.

Evidence of hand-writing.

But the witness may be asked whether he has seen a particular person write, and afterwards, whether he believes the paper in dispute to be his hand-writing. This course of examination, involves two questions; first, whether the supposed writer is the person of whom the witness speaks, and secondly, if he is the person, whether he wrote the paper in dispute: the first is a question of identity, the second a question of judgment, or a comparison, in the mind of the witness, between the general standard, and the writing produced. This kind of evidence, like all probable evidence, admits of every possible degree, from the lowest presumption, to the highest moral certainty. P.E. p. 239.

If a witness has received letters, purporting to have been written by a particular person on subjects of business, or of such a nature as makes it probable that they were written by the hand from which they profess to come, he may be admitted to speak to that persons hand writing; the admissibility of the evidence, must depend upon whether there is good reason to believe that the specimens from which the witness has derived his knowledge, were written by the supposed writer of the paper in question. P.E. p. 241.

A witness may be admitted to speak to a person's hand-writing, if he has seen letters which can be proved to have been written by him; but this antecedent proof of the identity of the person is indispensibly necessary, and farther hearsay of identity is wholly inadmissible. P.E. p. 243.

Proofs of hand-writing have also been allowed by comparison; the judges considering it a question of art, which might be answered by a person of skill and experience. P.E. p. 247.

Examination of Witnesses.

Should it be discovered in any stage of the trial, that a witness is interested, his evidence will be rejected.

When the witness has been regularly sworn, he is first examined by the party which produces him; after which the other party is at liberty to cross-examine.

Leading Questions.

Leading questions, that is, such as instruct the witness how to answer on material points, are not allowed on the examination in chief; for to direct witnesses in their evidence, would only serve to strengthen that bias, which they are generally but too much disposed to feel in favour of the party that calls them; but if a witness should appear to be in the interest of the opposite party, or unwilling to give evidence, the court will in its discretion allow the examination in chief to resume the form of a cross-examination; and in examining a witness for the purpose of directly contradicting another witness on the opposite side, as to some particular parts of his evidence, which no general examination in chief would be able to touch, leading questions may be pro-

perly asked. Thus for example; after exhausting the witnesses memory, as to the contents of a written instrument, he may be asked whether it contained a particular passage, which has been sworn to on the other side; otherwise it would be scarcely possible to come at a direct contradiction.

Witness privileged not to answer.

A witness cannot be compelled to answer any question which has a tendency to expose him to penalties, or to a criminal charge. Nor is a witness compellable to declare his own infamy, or to confess what would degrade his own character. On an indictment for a rape, a woman is not obliged to answer whether on some former occasion she has not had a criminal connection with other men, or particular individuals, nor is evidence of such intercourse admissible.

C. J. Freley would not allow a juryman to be asked whether he had asserted the guilt of the Prisone: before the trial.

It was once thought that a witness could not be compelled to give any evidence, which might subject him to a civil action, or charge him with a debt; but the reverse is now declared by statute. P.E. p. 105.

Cross-examination.

In cross-examinations the object of which is to sift evidence, and try the credibility of the witnesses, a great latitude is allowed in the mode of putting questions. The rule however is still subject to limitation. A witness cannot be cross-examined as to any collateral fact, irrelevant to the matter at issue, for the purpose of contradicting him by other evidence, and in this man-

ner to discredit his testimony. And if a witness on such cross-examination, before an irrelevant question, is disallowed or withdrawn, evidence cannot afterwards be admitted to contradict his testimony on the collateral matter.

When a witness has been once sworn to give evidence, the other party may cross-examine him, though he gave no evidence for the party who called him; and it is reported to have been ruled at nisi prius, that if a witness has been once examined by a party, the privilege of cross-examination continues in every stage of the cause; so that the other party may call the same witness to prove his case, and in examining him may ask leading questions. P.E. p. 108.

Finding of a less degree.

In discriminating the degrees of guilt of a crime with which a Prisoner stands charged, it frequently happens at Courts Martial, that on summing up the evidence on both sides, he may appear not guilty of the identical crime laid to his charge, but guilty of an offence of less magnitude, though of the same species or nature, and as such nearly connected with it. In this case it is customary for the court to acquit him of the greater, and find him guilty of the offence of the inferior magnitude, and to inflict a corresponding punishment. McA. p. 107.

Not of a distinct offence.

Though there may appear strong suspicions of a Prisoner's guilt of some other crime or offence, not set forth in the charge, yet in acquitting him of the one he is tried for, the court cannot legally find him guilty of any other distinct offence; neither can a Prisoner be found

guilty for what may be termed an ex post facto offence, or misdemeanor; that is, an offence committed after he had been confined, or even indulged as a Prisoner at large; but in all such cases he may be ordered into confinement, and brought to a new trial for the distinct crime or offence appearing against him. McA. p. 159.

Finding degrees of guilt.

A soldier tried for descrition may be found guilty of absenting himself without leave; the act and deed is the same, but the intentions that accompany it, which must be judged of from circumstances, are what constitute the crime, and not the length of time he is absent, or the distance to which he escapes. Many a man flies from his colours but for a short time, and yet gives evident proof of his being a descriter in every sense of the word, while another poor wretch may absent himself longer through drunkenness, fear of punishment for some other offence committed &c., and yet manifest no intention of totally abandoning the service.

But they cannot declare him guilty of mutiny, or any other distinct crime or offence, (though there may appear strong suspicion of his being so,) unless it be likewise in the charge given against him, before the trial commences. If in the course of trial for one crime, there appears strong suspicion of another, which is not given in charge to the court, though the Prisoner may be acquitted for the one he is then tried for, the court may order him into confinement, and he may be brought to a new trial for the crime he was suspected of. In finding guilty of a less degree, the court must expressly declare they acquit him of the greater: for it hath been adjudged, that if a jury on an indictment or an appeal of

murder, find the defendant guilty of manslaughter, without saying expressly as to the murder, it is insufficient and void, as being only a verdict for a part. Adye, p. 210.

It is quite unnecessary after finding a Prisoner guilty, to repeat the charges in the finding. H.C.B. 817.

Finding if doubt is entertained

In our criminal courts it is now considered as a rule of Law, (and the same considerations should hold at Courts Martial,) that if the jury entertain a reasonable doubt upon the truth of the testimony of witnesses, given upon the issue, which they are sworn "well and truly to try," they are bound in conscience to deliver the Prisoner from the charge found against him in the indictment, by giving a verdict of not guilty. McA. vol. 2nd, p. 47.

Incompetency of Witnesses.

When a witness appears, he must be regularly sworn, unless some objection is made to his competency. By the Law of England a person may be disqualified from giving evidence on several grounds:—

1st, From want of understanding. Such as have not the use of reason are disabled by their infirmity from giving evidence, as persons insane, idiots, and lunatics during the fit of lunacy. But a lunatic may be a witness in his lucid intervals, if he has sufficiently recovered his understanding. So a person born deaf and dumb, is not on that account incompetent, but if of sufficient understanding, may give evidence by signs with the assistance of an interpreter.

A witness must also know the nature of an oath; children, therefore, who are not able to understand its moral obligation cannot be examined. P.E. p. 8.

2ndly, From defect of religious principle.—Atheists and such infidels who profess not any religion that can bind their consciences to speak the truth, are excluded from being witnesses.

3rdly, From infamy of character.—There are many offences which our law considers such blemishes on the moral character, as to incapacitate from giving evidence in a court of justice; as treason, perjury, forgery, subornation of perjury, attaint of false verdict, and the like, which necessarily imply falsehood. The whole class of offences which come under the denomination of felony, (that is all offences which occasion a forfeiture of lands or goods), will also have the effect of making the witness incompetent. Some other offences also have the effect of making a witness incompetent after conviction, as fraud, in joining a conspiracy to accuse another of a crime, præmunire, barretry, and bribing a witness to absent himself and not give evidence.

As convicts in such cases cannot be witnesses, they cannot make affidavits to support a charge against others, but to exculpate or defend themselves, their affidavits have been allowed.

Some kinds of punishment were formerly thought to be marks of infamy, and therefore a person could not be a witness after standing in the pillory, or after branding. But the distinction is obvious. It is not the punishment, but the nature of the offence which causes infamy. Thus it is no objection against the competency of the witness that he has been in the pillory for a libel on the Government, or for a trespass, or a riot.

To render a witness incompetent, the judgment must be proved, as well as the conviction, and can only be proved by a copy of the record; even an admission of the witness himself, of being in prison under judgment for grand larceny, or of his having been guilty of prejury on another occasion, will not make him incompetent, however it may affect his credit.

All felons having received benefit of clergy, are restored to their credit, whether burnt in the hand or not, if they have received a substituted punishment. P.E. pp. 14 to 19.

4th, From interest.—With regard to the nature or degree of interest which makes a witness incompetent, there have been various opinions; and it is not possible to reconcile the earlier cases on this subject, with those of a more recent date.

The old cases on the incompetency of witnesses, were generally decided on narrow grounds. Evidence which ought to have been believed with caution, was at once excluded without being heard; as if juries were not to be trusted with the means of judging right, because it was possible their judgment might be wrong. Thus in many cases information was lost, and truth and justice sacrificed. But the judges of latter times have endeavoured, as far as possible, consistently with former decisions, to let the objection go to the credit, rather than to the competency of the witness. P.E. p. 26.

Husband and wife.

As a party on record is not a competent witness, so is neither the husband or wife of the party; but no other relation is excluded. A father may give evidence

for his son, and though the relation between them may influence his testimony, it will not render him incompetent. The reason of excluding husband and wife from giving evidence, either for or against each other, is founded partly on their identity of interest, partly on a principle of public policy, which deems it necessary to guard the security and confidence of private life, even at the risk of an occasional failure of justice. P.E. p. 38.

The husband and wife are not allowed to give any evidence that may directly criminate or even tend to criminate each other. There are some cases in exception to this general rule:—

1st, If a woman is taken away by force and married. 2nd, On an indictment for a second marriage, during the continuance of the former one, the second wife may be an evidence.

3rd, A wife may be a witness on the prosecution of of her husband, for an offence committed against her person.

So in Aygre's case, on an indictment for beating his wife, Lord Raymond allowed her to give evidence. A wife is permitted to swear the peace against her husband, and an affidavit of a married woman has been admitted to be read on application to the court of King's Bench, for an information against her husband, for an attempt to take her away by force after articles of separation; and it would be strange to permit her to be a witness to ground a prosecution on, and not afterwards to be a witness on the trial. On the trial of a man for the murder of his wife, her dying declarations are evidence against him.

Courts of Enquiry.

The court was cleared, and their Lordships deliberated for about ten minutes, when strangers were again admitted.

Chief Justice Dallas delivered their judgment, which was in favour of the rights of the Crown to appoint Courts of Enquiry. H.C.B. p. 415.

Council of Enquiry.

In the army a practice is frequently resorted to among the officers of a regiment or corps, of holding among themselves a council of enquiry, when any member of the corps has been suspected of any crime or impropriety of conduct, in order to ascertain his delinquency or innocence, that proper measures may be eventually taken. McA. vol. 1st, p. 106.

Attending Courts of Enquiry.

With regard to the 3rd charge M. N. was pleased to remark, that although the opinion of the court might be acquiesced in, yet it appeared that the Prisoner was not free from all imputation of blame for the conduct upon which that charge was founded, inasmuch as it was the duty of Assistant Surgeon W. to have obeyed the order of his superior officer Colonel Hay, as far as that order required his attendance before the court of enquiry, as the compliance with it would not, (as the Prisoner erroneously conceived) have precluded him from the right of declining to answer any questions, or to make any statement which might, in his opinion, have proved prejudical to him in the course of any ulterior inquiry into his conduct. H.C.B. p. 448.

Judge Advocate.

Should an illegal measure be persevered in, in opposition to the advice of the Judge Advocate, though not warranted to enter his dissent in the form of a protest upon the record of the proceedings, (for that implies a judicative voice,) he ought to engross therein the opinion delivered by him on the controverted point. Tytler, p. 354.

I must confess I am decidedly of a different opinion from Mr. Tytler, with regard to the propriety or expediency of the Judge Advocate, in his character of prosecutor, having a personal conference with the person to be tried, and learning the scope of his defence. p. 359.

I have never understood it to be the duty of the Judge Advocate, in all cases, to furnish a Prisoner previous to the trial, with the names and descriptions of the witnesses by whose testimony any act objected to him, is expected to be proved. p. 358.

Incompetency of Judicature.

A Prisoner, by pleading before an improper judicature, cannot establish in the court a jurisdiction which the legislature hath withholden, nor give thereby any sanction to their proceedings. Should a non-commanding officer and soldier be brought before a regimental Court Martial for mutiny, desertion, or any other crime, only cognizable by a General Court Martial, he may refuse to plead and insist upon being tried by a General Court Martial, or he may appeal after having pleaded. Adye, p. 104.

G. O. C. C. 6th June, 1821.

The proceedings of a Garrison Court Martial, held at Chunar, upon Gunner James Brown, from the 11th to the 20th April inclusive, have been laid before the Commander in Chief.

It appears that the Prisoner was brought to trial before the court " for having been in a state of intoxication, when warned for duty, and for riotous conduct upon that occasion." On examining witnesses for the prosecution, the act of the Prisoner, which the court considered as having been mutiny, was testified; on that construction of the circumstance, the court suspended proceedings, and represented to the Commandan', the incompetency of a Garrison Court Martial to pass sentence on a crime of such magnitude. The Commandant having referred the case to the Major General commanding the division, the latter properly explained to the court, that it had perfect powers to decide upon the charge on which the Prisoner was brought to trial. and of which alone the court could have cognizance. The court nevertheless adhered to its doubt.

The Commander in Chief gives to the members of the court the fullest credit for having acted on a conscientious scruple, but His Excellency is obliged to remark, that the procedure of the court has been completely erroneous, and would have borne the character of contumacious disobedience, but for its being visible, how the court with thorough purity of motive has misconceived the point.

If in the course of evidence for the prosecution particulars are brought forth, establishing * the presumption of" a much graver delinquency than that for which the Prisoner is arraigned, and it be supposed, that those

circumstances must have been unknown to the authority which ordered the trial, it is undoubtedly fitting for the court to stop its proceedings, and to apprize the superior authority of what had been elicited during the investigation. This step however would be justified solely by the assumption that the Commanding officer might not have comprehended the real quality of the case.

Should the Commanding officer, (as in the instance under review) direct the court to proceed on the original charge, it is the unquestionable duty of the court to pronounce its virdict, as to the innocence or guilt of the Prisoner, with respect to the terms of that charge, and award an adequate punishment, if it shall find the Prisoner criminal in the degree alleged against him.

The reason of this will be obvious on a moment's reflection: if the Prisoner has incurred the guilt of mutiny, he must have been guilty of riotous conduct; because it is an inseparable ingredient in the greater crime; and it lies in the discretion of the Commanding officer, what may be the amount of example necessary for the preservation of discipline, by which he will be guided on hearing the extent of the accusation.

The court therefore acts consonantly to its oath, in deciding the evidence, or non-existence of criminalty, on the scale which has by due authority been submitted to its judgment, although it may surmise the transgression to be of heavier stamp.

No question has ever been thrown on the propriety of trying deserters, (except in aggravated cases), for absenting themselves without leave, instead of trying them for desertion, in order that the fault may be corrected by a moderate infliction. This is in exact accordance with the practice of British courts of justice, where indictments are continually preferred, in terms which shall reach only the minor shade of an offence, otherwise capital; so that chastisement may visit crime, without proceeding to what would be in the special case an objectionable extremity.

Lunatics.

The second case of a deficiency in will, which excuses from the guilt of crimes, arises from a defective or vitiated understanding, viz. in an Idiot or a Lunatic. For the rule of law as to the latter, which may easily be adopted to the former is, that Furiosus furore solum punitur.

In criminal cases therefore Idiots and Lunatics are not chargeable with their own acts, if committed when under these incapacities, no, not even for treason itself.

Also if a man in his sound memory commits a capital offence, and before arraingment he becomes mad, he ought not to be arraigned for it; because he is not able to plead to it with that advice and caution that he might. And if after he has pleaded, the Prisoner becomes mad, he shall not be tried: for how can he make his defence? If after he be tried and found guilty, he looses his senses before judgment—judgment shall not be pronounced; and if after judgment he becomes of non-sane memory, execution shall be stayed: for peradventure, (says the humanity of the English law) had the Prisoner been of sound memory he might have alleged something in stay of judgment or execution.

Note by the Editor.—" If the punishment were less than death, and were inflicted on a Prisoner deprived of reason, it would be improductive of one of the grand

ends of punishment—the correction of the criminal. Human tribunals are only justified in introducing the pain and evil of punishment, when it is likely to prevent that greater degree of evil which would result from the unrestrained commission of crimes."

The execution of an offender is for example, ut pæna ad paucos, metus ad omnes perveniat; but it is not so when a madman is executed, which would be a miserable spectacle, both against law and of extreme inhumanity and cruelty, and can be of no example to others. But if there be any doubt whether the party be compos or not, this shall be tried by a jury. B.C. vol. 4, pp. 24, 25.

Having lucid intervals.

But if a lunatic have lucid intervals of understanding, he shall answer for what he does in those intervals, as if he had no deficiency, yet in the case of absolute madmen, as they are not answerable for their actions, they should not be suffered to go loose to the terror of the King's subjects.

Artificial and voluntary.

As to artificial voluntary contracted madness, by drunkenness or intoxcation, which depriving men of their reason puts them in a temporary phrenzy, our law looks upon this as an aggravation of the offence, rather than as an excuse for any criminal misbehaviour. B.C. vol. 2nd, p. 24 and 25.

Improper plea of Lunacy.

The Commander in Chief confirms the above sentence as it is an acquittal, but his Lordship feels himself under the necessity of remarking a grave error in the decision of the court.

The prisoner having rested his defence on the plea of being insane when he committed the indecency for which he was brought to trial, the officiating Judge Advocate desired leave to rebut that plea, by bringing witnesses to prove that such insanity did not arise from accidental illness, but was the consequence of the Prisoner's indulgence in strong liquors, a consequence asserted to have been repeatedly experienced by the Prisoner, without its restraining him in his unhappy propensity. The court in over ruling the proposal of the officiating Judge Advocate, who had not felt himself at liberty to anticipate such defence, evidently overlooked the legal difference of influence, in the case between a derangement ascribable to constitutional malady, and one which thad the officiating Judge Advocate substantiated his point,) was to be considered as wiltully and culpably incurred by the prisoner. H.C.B. 495.

(Signed) J. NICOL, Adjt. Genl.

Had the madness been proved to have been of the nature stated by the officiating Judge Advocate, the circumstance would aggravate instead of excuse the offence, (vide Supra). The defence being new matter, if pleaded in the general issue, the Judge Advocate had an undoubted right to rebut it.

Opinion.

The court having deliberated on the evidence before them respecting the state of the Prisoner's mind, are unanimously of opinion that he is not in his proper senses, and that therefore the trial ought not to proceed. H.C.B.

Approved and Confirmed (Signed) MOIRA,

He who excites a madman to commit a crime, is a principal offender, and as much punishable as if he had done it himself. Adye, p. 205.

Officers Brevet and half pay.

In the year 1786, after a long discussion of the subject in parliament, it was decided that officers holding commissions by brevet, though receiving no pay, were subject to the regulations of the Mutiny Act; but that officers on half pay, did not fall within its provisions and penalties. Tytler, p. 212.

In the case of Lord George Sackville, the judges declared unanimously, that an officer or soldier after being dismissed, could be brought to trial for a crime he had committed while in commission or pay. Tytler, 113.

Officers suspended.

Officers under suspension are amenable to a Court Martial for all acts committed by them while under suspension. Tytler, 127.

Non-commissioned Officers.

By the articles of war, and by long usage in the army, similar power of degrading a non-commissioned officer, and reducing him to the ranks, is vested at all times in the Colonel of the Regiment.

The 18th article of war, 16th section, declares, that no commissioned officer shall be cashiered or dismissed from our service, excepting by an order from us, or by the sentence of a General Court Martial, approved by us, or by some person having authority from us, under our sign Manuel: but non-commissioned officers may be discharged as private soldiers, and by the order of

the Colonel of the Regiment, or by the sentence of a Regimental Court Martial, may be reduced to private sentinels.

In February 1750, Colonel Townshend moved to have a clause added to the Mutiny Bill, for preventing any non-commissioned officer being broke or reduced into the ranks, but by the sentence of a Court Martial; but the clause was afterwards withdrawn, and no question was put upon it. McA. vol. 1st, p. 156.

Definition of Perjury.

Perjury is defined, by Sir Edward Cook, to be a crime committed when a lawful oath is administered, in some judicial proceeding, to a person who swears wilfully, absolutely, and falsely, in a matter material to the point in question.

The law takes no notice of any perjury, but such as is committed in some court of justice, having power to administer an oath, or before some magistrate, or proper officer invested with a similar authority, and some proceedings relative to a civil suit, or criminal prosecution; for it esteems all other oaths unnecessary at least, and therefore will not punish the breach of them. which reason, it is much to be questioned, how far a magistrate is justifiable in taking a voluntary affidavit, in any extrajudicial matter, as is now so frequent upon every petty occasion; since it is more than possible, that by such idle oaths, a man may frequently "in foro conscientia" incur the guilt, and at the same evade the temporal penalties of perjury. The perjury must also be corrupt, (that is "malo animo,") wilful, positive, and absolute; not upon surprise or the like; it also must be on some point material to the question in dispute, for

if it only be in some trifling collateral circumstance to which no regard is paid, it is no more penal than in the voluntary extrajudicial oaths before mentioned.

Note by the Editor.—" Where an oath is required by an act of parliament, but not in a judicial proceeding, the breach of that oath does not seem to amount to perjury, unless the statute enacts that such oath, when false, shall be perjury, or shall subject the offender to the penalties of perjury." B.C. vol. 4th, p. 137.

Punishment of Perjury.

Although the Mutiny Act does not authorise a Military Court Martial to inflict a summary punishment for perjury, yet there is no doubt that offenders, subject to military authority, may be proceeded against by indictment, or punished by the sentence of a General Court Martial to be assembled for that purpose. McA. p. 141.

Pleas.

We are now to consider the plea of the Prisoner, or defensive matter alleged by him on his arraignment; if he does not confess or stand mute. "This is either lst, a plea to the Jurisdiction; 2nd, a Demurrer; 3rd, a plea in abatement; 4th, a special plea in bare, or 5th, the general issue."

lst, A plea to the Jurisdiction, is where an indictment is taken before a court which hath no cognizance of the offence, as if a man be indicted for a rape at the Sheriff's Court, or for treason at the Quarter Sessions. In these or similar cases he may except to the jurisdiction of the court, without answering at all to the crime alleged.

2nd, A Demurrer to the indictment, when the Prisoner joins issue on a point of law in the indictment, that the fact stated is no crime. However, as there is a doubt whether he can afterwards plead the general issue, "not guilty," demurres to indictments are seldom used, since the same advantages may be taken upon a plea of not guilty, or afterwards in arrest of judgment, when the verdict has established the fact.

3rd, A plea in abatement, is principally for a misnomer, or wrong name, or false addition to the Prisoner; as if James Allan, gentleman, is indicted by the name of John Allan Esq. he may plead that he has the name of James and not of John; and that he is a gentleman and not an esquire: and if either fact be found by a jury, then the indictment shall be abated, as writs and declarations may be in civil actions. But in the end there is little advantage accruing to the Prisoner by these dilatory pleas: because if the exception be allowed, a new bill of indictment can be framed, according to what the Prisoner in his plea avers to be his true name and addition. For it is a rule in all pleas of abatement, that he who takes advantage of a flaw, must at the same time shew how it may be amended.

4th, Special pleas in bar, which go to the merits of the indictment, and give a reason why the Prisoner ought not to answer it at all, nor put himself upon his trial for the crime alleged. These are of four kinds: a former acquittal, a former conviction, a former attainder, and a pardon.

5th, The general issue, or plea of "not guilty," on which plea alone the Prisoner can receive his final judgment of death. B.C. vol. 4.

If the Prisoner should plead guilty, evidence should be heard of the fact or facts, or how can the crown, or the officers authorised to confirm a sentence, have any ground for extending mercy. Sir C. M. preface to Tytler, p. 22.

Prisoners' declarations.

Verbal confessions, and what a P-isoner has been heard to say at any time in conversation, or by observation, relative to the matter in issue, may be given in evidence against him. But though the declarations of a Prisoner respecting facts, or which apply to the particular case charged, the intent making part of the charge, may be given against him; they cannot for him. McA. vol. 2nd, p. 69.

Evidence against a Prisoner.

It is a settled rule of law, that no evidence can be given against a Prisoner but in his presence. McA. vol. 2nd, p. 72.

In exception to the general rule, that no evidence can be received against a Prisoner but in his presence, it has been repeatedly determined, and is unquestionably law, that on a trial for murder, the declaration of the deceased, after the mortal wound was given, conscious of approaching death, may be received in evidence against a Prisoner, although such declaration was not made in his presence. McA. vol. 2nd, p. 72.

What has been sworn against a Prisoner on the trial of another person, ought not to be given in evidence against him on his own trial.

The confession of a Prisoner, taken on oath, cannot be read in evidence against him. McA. vol. 2nd, p. 73.

Confession of a Prisoner.

It is now a settled rule of common law, that in cases of felonies and misdemeanors, if the confession of the

Prisoner be voluntarily made, and regularly proved at the trial, it is sufficient, if the jury believe it to be true, to convict the Prisoner, without any corroborating evidence to support it. But the only kind of confession that could go to a jury, ought to be uninfluenced by fear, and uninduced by hope. McA. vol. 2nd, p. 79.

Proceedings.

It is not necessary to send the original papers which have been received in evidence with the proceedings, but copies of them should be entered in an appendix, as loose papers are likely to be lost or mislaid; and it should be stated, that the papers produced were duly authenticated. Remarks on Tytler, p. 21.

Sir C. M.—The recommendation should always be written under the sentence, together with the signatures of the several members so recommending; for it is very possible that a detached paper may be lost, mislaid or, forgotten.

Evidence of a Prosecutor.

The practice of a prosecutor being entitled to give evidence in support of the charges brought against a Prisoner, is now perfectly understood, and is extremely common at Courts Martial, in the navy as well as in the army, and is the flaily practice in all criminal prosecutions. On similar principles of justice, the person accused may call on the prosecutor to give evidence to facts in exculpation of the charge, as well as to the general conduct and tenour of his character; and the prosecutor may also be called upon to produce records or documents of any kind, which may be deemed necessary to the Prisoner's defence. McA. vol. 2nd, p. 58.

Reply of the Prosecutor.

The prosecutor is allowed, by argument, to reply to the Prisoner's defence, but not to bring evidence, unless new matter has been brought forward in the defence.

Some doubts have arisen as to a Prisoner's having a right to rejoin to the reply of the prosecutor; this mistake however, it probably grounded on the supposition of a case which rarely happens, of a prosecutor being permitted to introduce new evidence in his reply; in which case the Prisoner is entitled to be heard upon such new evidence, and the prosecutor will, in return, be entitled to reply to the same extent.

It is a general rule, that in criminal prosecutions the injured party may be a witness, although on the conviction of the Prisoner, he will, in many cases, be entitled to a reward.

If the Prisoner shall, in his defence, have impeached the credibility of any witnesses for the prosecution, it is competent for the prosecutor to re-establish their character by new evidence; or if the Prisoner in his defence shall have introduced any new matter, encountering the evidence of the charge, but to which the evidence was not directed, the prosecutor is allowed to examine witnesses to that new matter: as for example, a Prisoner is charged with an act of mutiny, and the charge is clearly proved; but the Prisoner in his defence alleges and adduces evidence to shew that he was compelled by others to the commission of the act, against his own will, and at the hazard of his life, this being new matter to which the former evidence for the prosecutor does not in the least apply, the prosecutor is allowed to re-argue it, by the examination of witnesses, on the production of such documents as he thinks fitted to disprove it. In such cases it is customary to allow the Prisoner the liberty of a rejoinder, or answer to the prosecutor's reply; an indulgence, to which, in ordinary cases, he is not entitled.

Prosecutors have, in some instances before Courts Martial, been permitted to mark passages in their opening address, and swear to those passages as evidence (by consent of the Prisoner,) virtually a preparation of exidence, which is never allowed; for the same reason the other ought to be discontinued.

Retirement.

His Royal Highness has been further pleased to command it to be signified to Colonel A. and the officers of the 1st Battalion of the 22nd Regiment, that their conduct in general has been highly reprehensible, in assuming the power of admitting Lieutenant Finto on the corps, after an arrangement had been made for his retirement, rather than stand the issue of a General Court Martial, and in their harsh proceedings towards the Prisoner, who refused his concurrence to such an irregular proceeding. H.C.B. p. 812.

Revisal.

° G. O. C. C. 1st, June, 1815.

It having been observed in several instances, when the proceedings of subordinate Military Courts have been revised, that fresh witnesses have been called and examined, the Right Honourable the Commander in Chief, is pleased to prohibit a practice so highly irregular and objectionable. Whenever the proceedings of Courts Martial are ordered to be revised, the revision is to be confined to the matter already recorded on their minutes. H.C.B. p. 398.

Sentence.

The King can no more interfere with the procedure of Courts Martial, in the execution of their duty, than he can with that of any of the fixed courts of justice; nor even after the Court Martial has pronounced its sentence, is it in the power of the sovereign to add to or alter that sentence, in any one particular, unless a recommendation to that effect shall be therein contained.

By whom alterable.

The King, in virtue of his prerogative, may entirely remit the punishment which the court has awarded, or by disapproving of their sentence, may order the court to sit again, and to review their proceedings and judgment; but he can no more decree any particular alteration of their sentence than he can alter the judgment of a civil court, or verdict of a jury. Even with regard to the power of ordering a review of the sentence, the sovereign's powers are limited, for it is declared by the Mutiny Act, " that no sentence given by any Court Martial, and signed by the president thereof, shall be liable to be revised more than once."

Yet, although the sentence of a General Court Martial is not alterable by the sovereign, or by any person to whom the crown has delegated the power of assembling those courts, it is at all times competent to his Majesty, and entirely consistent with his constitutional authority, to remark on whatever may have been omitted by the court, or improperly judged of by them, and which from its blameable nature calls for animadversion. Such remarks have the best effects, in samulating the diligence and care, as well as guarding the

propriety and rectitude of those tribunals. Tytler, pp. 131, 132.

The report of the judges in this case, conveys also an impressive lesson, namely, that any punishment directed to be inflicted by the articles of war, cannot be applied by any other authority than that of the Court Martial which tried the offender. Hence, this report is founded upon those humane and constitutional principles of law, established and recognized in this country, namely, that the executive power cannot add to the punishment adjudged to be inflicted, for offences tried at Courts Martial, but it may in the exercise of its prerogative of clemency, remit, mitigate or diminish the punishment. McA. vol. 2, p. 229.

Varying from the Statute.

Now the illegality of the sentence consisted in its variance in the penalty assigned by it from the direction of the act, and such illegality will arise in every case where there is any departure, no matter what it be, from the letter of the penalty which the law has thought fit to assign to any particular crime. The original jurisdiction of the court, over the offence itself, and all others, arises out of the power of the legislature, which must be as authoritative over the sentence, when it chooses to prescribe what it shall be, as on all other proceedings and incidents of the trial. Sentence, Sam. 303.

Not to be interfered with.

The latter branch of the report of the learned judges shews, that if there be a defect in the original sentence, that none can cure it but those who passed such sentence; that no authority however great can interfere with a court of justice, though it be for the purpose, certainly a specious cause, of making it correspond with the known intention of the law. Sentence, Sam. 304.

Variations in.

The sentence of dismissal, according to the modern acceptation of the word, is not co-extensive in its operation with that of cashiering, implying no disability for future employment in the service, as the latter coes. Sentence, Sam. p. 308.

Subpana.

In civil proceedings, as we have seen, a witness is not obliged to attend unless his expenses are duly tendered; but in criminal prosecutions the demands of public justice supersede every consideration of private inconvenience, and witnesses are unconditionally bound to appear. On the other hand, it is reasonable, and highly expedient, that when they attend on behalf of the public, a fair compensation should be given them for their trouble and necessary expense. The statute 18, George III, chapter 19, Sect. 8, enacts, that when any person shall appear on recognizance or subnæna to give evidence, as to any grand or petty larceny or other felony, whether any bill or indictment be preferred or not to the grand jury, it shall be in the power of the court (provided the person shall, in the opinion of the court, have bonâ fide attended in obedience to such recognizance or subpœna;) to order the treasurer of the county or division, in which the offence shall have been committed, to pay him such sum as to the court shall seem reasonable, not exceeding the expenses which it shall appear to the court the said person was bonâ fide put unto, by reason of the said recognizance and subpæna, making a reasonable allowance, in case he shall be found to be in poor circumstances, for trouble and loss of time. P.E. p. 3.

In some cases a subposna can have no effect: as where the witness is in custody, or on board a ship, under the command of an officer who refuses to allow his attendance.

Habeas Corpus ad testificandum.

The course then is, to sue out a writ of Habeas Corpus "ad testificandum," for which purpose application ought to be made to the Court, or to a Judge, upon attidavit of the party applying, stating that he is a material witness, and in case of his being on board a ship, that he is willing to attend. P.E. p. 5.

Ducas tecum.

If a witness has in his possession any deeds or writings, which are thought necessary at the trial, a special clause must be inserted in the subpæna called a "Ducas tecum," commanding him to bring them with him; when the writings are in the hands of the adverse party, or his attorney, notice should be given to produce them; and if after proof of a reasonable notice, they are refused, secondary evidence of the contents will be admitted. It is not necessary to give notice to the defendant himself, giving it to his attorney will be sufficient, even in penal actions.

This writ of subpæna "ducas tecum," as well as the other writ of subpæna "ad testificandum," is compul-

sory upon the witness; and though it is a question for the consideration of the judge at the trial, whether in any particular case the production of writings should be enforced, yet the witness should always have them ready to be produced if required, in obedience to the judicial mandate. P. E. p. 7.

All trials by Courts Martial are criminal, (the Prisoner therefore is not bound to tender expenses,) the suit being "between our Sovereign Lord the King and the Prisoner to be tried." Though a nominal prosecutor may conduct the cause.

Transportation.

Opinion of Sir Charles Morgan.—A sentence of transportation has not, in any instance within my knowledge, been carried into effect, except for the crime of desertion; nor in the instance of desertion, until an express clause was inserted in the Mutiny Act for that purpose; and I have reason to know that much doubt has been entertained, whether without such particular provision, the judgment would be warrantable, and the conferring of an authority by an express clause, to give such sentence for the crime of desertion, at the same time that it furnishes a presumptive argument that it would not otherwise have been correct, begets a still stronger presumption, that in any other case than that which is provided for, it is not regular to award such a punishment. H.C.B. p. 59.

Votes.

At Courts Martial held at the Horse Guards, the practice has been different in its mode, but tantamount in its effects. Such members of a Court Martial as have by

their votes absolved a Prisoner, are not required to give a vote, when the question of punishment is proposed, in consequence of the Prisoner's having been convicted by the majority of the members of the Court Martial; as it seems incongruous, that one who thinks the Prisoner not guilty, should give a voice for the inflicting of any punishment, but the number of the members who have acquitted him, are always counted in favour of the Prisoner, and thrown into the scale with those who vote for the mildest punishment.

Witnesses compelled to attend a Court Martial under penalties of common law. Sam. p. 206.

Previously instructed.

Extract from the proceedings of a General Court Martial, of which General Sir G. Howard was president, and Sir C. Gould, Judge Advocate, for the trial of Lieutenant General Murray, on charges preferred by Sir William Draper, January 1783:—

Question by Sir W. D.—" Whether you (i. e. Captain Edward Don) have seen the questions General Murray proposed, before you came into court?"

General Murray .- "We certainly did."

Sir W. Draper.—" Is that usual?"

Judge Advocate.—"•If the question is unexceptionable, I don't know that there is any harm in informing a witness that he is to be examined on this or that point; but if the question be a leading one, then it is improper for the witness to see it."

Captain Don.—" I knew the point I was to be examined on, but I never told General Murray what my answer would be."

Sir W. Draper.—" Were the questions which have been proposed to you, previously concerted between you and General Murray?"

Captain Don.—" Certainly.—General Murray acquainted me that he would examine me as to those points, and I saw the questions previous to coming into court. I understood it was legal, for the opinions of two Lawyers had been asked upon the subject; they said it was legal; but by no means to tell what our answers would be, and therefore without hesitation I read the questions over and over again."

Court.—" But were the questions concerted between you and General Murray?"

Captain Don.—" Yes—General Murray asked me if those questions were proper to the point; and they were framed to the point in question by General Murray and me. I had minutes of the whole transaction taken down at the moment."

General Murray.—" There was an affidavit made by Captain Don, before the Judge Advocate, on the fact relative to this business. I asked a counsel if that affidavit could be received in evidence in the court. He said 'yes,' but we must form the questions so as to bring the substance of that affidavit before the court. The questions were formed accordingly, and I have the affidavit if the court wish to see it. I saw my reputation was at stake, and I therefore took these precautions to authenticate the fact, in case either of us died." H.C.B. 572.—Here the Conversation ended.

What a witness may have been heard to say at another time, may be given in evidence, in order either to invalidate or confirm the testimony which he gives in court. McA. vol. p. 72.

Memory failing

Where the memory of a witness fails him with respect to time, or particular dates, he may be allowed to recur to notes, or he may be set right by the court, but he is not allowed to read any papers of evidence previously prepared. McA. vol. p. 73.—Johnstone's Trial p. 380.

Calling fresh Witness.

Judge Advocate.—" I apprehend it is perfectly fair for the court to satisfy themselves in any way they think proper, upon any part of the examination, and when the case on both sides is closed, the court will call any witness they think proper to call." II.C.B. p. 811.

Privileged.

· A witness can depose only to such facts as are within his own recollection. But to assist his memory, he may use a written entry, or memorandum, or the copy of a memorandum, and if afterwards he can positively swear to the truth of the fact there stated, such evidence will be sufficient. But if he cannot from recollection speak to the fact, any further than as finding it stated in a written entry, his testimony will amount to nothing. When a witness has recourse to a written memorandum. for the purpose of assisting his recollection, there seems to be no good reason for confining him to such writings as were drawn up at the precise time when the facts occurred; for one person may have as strong and clear a recollection, from looking at a paper written half a year after the fact, as another who wrote down the fact on the very day it happened. However the entry ought to have been made by the witness himself, or if made by

another, examined by him, while the fact was fresh in his memory. P.E. 106.

Contempt in Witnesses.

If a witness is guilty of contempt by refusing to answer a question which is legal, he may be indicted for a misdemeanor at common law; and if a military man, may be immediately committed to custody, and charged for a contempt or disobedience of orders. Rem. on Tytler, by Sir C.M. 17.

Incompetent Witnesses.

The members of the Court Martial may however under particular circumstances exercise their discretion in calling any witness before them, from whom they have reason to think the truth may be obtained, whether adduced by the prosecutor or not; but it might be considered as a very hard and improper exercise of that discretion, (indeed we would rather regard it as illegal,) if when a Prisoner is standing upon his trial, the court shall adjourn their proceedings to a distant day, in order to enable the prosecutor to bring forward a fresh witness. McA. vol. 2, p. 124.

Persons involved in the same criminal charge are, upon sound principles of law, incompetent witnesses for one another; because from the infirmity of human nature, it is presumed that they would mutually acquit by false testimony.

Unconvicted accomplices are objected to, only when included in the indictment, if the indictments are made separate, they are admitted.

(Vide " Charges" note.)

Explanation of the Abreviations for Authors quoted.



Tyt. Tytler, 3rd Edition, by C. James, 1814.

Mc. A. McArthur, Edition 1805.

H. C. B. Lieutenant Hough's Case Book.

M. L. E. Military Law of England, (Anonymous.)

B. C. Blackstone's Commentaries.

P. E. Phillip's Law of Evidence.

Adye.

Sam. Samuel.

ARTICLE II.

Introduction to a series of papers upon the organization, equipment, &c. of the Honourable East India Company's Artillery.

To the Editor of the Military Repository.

SIR,

Circumstances lately brought to my notice, and occasioned an attentive reading of, the proceedings of a Committee of Artillery officers, held in Bengal in 1793, by order of Lord Cornwallis.

The perusal of the abovementioned paper, combined with my knowledge that a general, and most desirable change in the construction of our Ordnance carriages is now about to be accomplished, awakened a train of reflections (which if I have not deceived myself) are sufficiently important to warrant me in giving them, and the result of them, publicity though the medium of your pages.

I therefore propose to trouble you with a series of papers on the "Organization, equipment &c of the Honourable East India Company's Artillery" of which series the present letter may be considered as the "Introduction."

Let not this frank confession startle you, Mr. Editor, or any of your readers. I neither intend to be indiscriminately lavish of praise or censure upon the past or present.

I shall endeavour tenderly to express my opinions, where I deem it necessary, upon the present state of

things, and I shall oppose my opinions occasionally according to the excellent rule, "suaviter in modo, fortiter in re."

My purpose is not to expose the existing defects with a rude hand. I do not pretend to be sufficiently master of the art, to be able to discern them to their full extent; and still less sanguine am I of being able to point out corrections for every one of those which I have observed: but, as superficial blemishes may, with a fittle care, be separated from the surface of a fine painting by the most artless hand, without injury to the original, so may I hope to effect some good, without the chance of doing any harm.

After reading the "Proceedings" of the Committee of 1793, of which I forward you a copy to be printed with this letter, I could not satisfy my mind that the Committee, though composed of officers of distinguished merit, had effected the purpose for which it was assembled. If so, whence has sprung up the interminable variety of patterns and constructions of ordnance carriages, all allowed to be more or less defective, with which this service has for many years been perplexed, to the total prevention of all uniformity, in points of vital importance towards the effectual service of this important arm.*

Still more unsatisfactory is the result of inquiry into the origin and adoption of these various patterns.

^{*}We feel great gratification in informing our correspondent A. Z. and our readers, that a new gun carriage and ammunition waggon, nearly on the pattern of the excellent Royal Artillery carriages, have been finally adopted for this service, by authority of the Supreme Government. Ed.

Scarcely any records are to be found, or even partially detailed statements, of advantages which were anticipated by adopting any one construction in preference to another.

It is far from my intention to throw the least shadow of blame upon the Committee of 1793. It was composed of officers of undoubted talent, of rank, and experience-it was assembled by order of the highest military authority in India—the points of discussion were those of the greatest import in the practical part of the profession—the individuals had the advantage of having had long experience, as to the pro's and con's of the matter upon which they were called upon to deliberate—there could not have existed any possible bias to warp their judgments on the side of error: yet, what was the result? We might have expected at least that some established pattern for gun, carriage, and ammunition waggon would have resulted from the Committee of 1793, the excellencies of which would have been such as to have protected them, for a time at least, from future innovations.

Some advantageous alterations were proposed and adopted; others do not appear to me to have been equally judicious: this is matter of opinion however, upon the discussion of which I shall enlarge in my future papers.

I am willing to suppose that the Committee did all that was expected from it, but this result is not sufficient to satisfy me. I should have been satisfied if I could at this day say, here is a piece of ordnance which was adopted for the service by the Committee of Artillery officers of 1793—here is the cariage—here is the ammunition waggon. The reasons for adopting

them are so and so; the advantages over former constructions are made self-evident, fully detailed, and satisfy rigid examination.

Had this been the case I should probably have been a silent admirer of the result, and I consider that had it been so, the report would have been of inestimable value to the service: for, in my opinion, it becomes a point of duty amongst officers of Artillery to make themselves fully acquainted with the excellencies as well as the defects, of the materiel they are called upon to operate with; and these inquiries should receive every support and assistance in the prosecution of them from the higher authorities.

It was with peculiar satisfaction that I learnt the establishment of a depót of instruction at the head quarters of the Artillery at Bombay; a similar establishment has been formed at Madras. Is the Bengal Presidency alone to remain without such an establishment? I feel that it has only to be proposed, through the proper channels, (where it is sure of support), to be introduced; and I trust before No. 1 of my intended series, now in preparation, is published, that I shall have no reason to repeat the question. But I shall not enlarge upon this and other professional subjects at present, I wish to present your readers with the proceedings of the Committee of 1793, which is undoubtedly an interesting, and in some points a valuable document.

In concluding my present letter, I beg to mention that I shall be extremely happy to be assisted in my "Series," by communications on subjects connected with this important discussion, from either of the three Presidencies.

Such communications may be addressed to you, Mr. Editor, by the writers, and I shall trust for your early communication of them to

Your humble servant,

Bengal Presidency, March, 1824.

A. Z.

Proceedings of a Committee held at Dum Dum, by virtue of the following General Orders:—

Extract of General Orders by Earl Cornwallis, December 18th, 1792.

"A Committee composed of the following field officers and Captains of Artillery, who served in the Mysore country during the late war, to assemble at Dum Dum after the dissolution of the European General Court Martial, now sitting in garrison, for the purpose of pointing out whatever defects they may have observed in the construction of the different gun carriages and tumbrils, and to suggest such alterations as may have occurred to the members of the Committee, tending to the improvement of the carriages and tumbrils, and the most convenient mode of transporting ammunition and stores in the field."

President, Major Woodburn.

Members,

MAJOR MONTAGUE, CAPTAIN HOWELL, CAPTAIN HORSFORD, CAPTAIN GLASS.

"The proceedings of the Committee to be transmitted to the Secretary of the Military Board."

Proposed by the President to the members of the Committee,

GENTLEMEN,

In order that we may observe method and perspicuity in our proceedings, I conceive it will be necessary for the members of the Committee to consider the subject of our inquiry under separate heads.

1st, I would consider what is the best construction for the carriage of the light brass field pieces at present in use, together with their limbers and ammunition tumbrils. In doing this, the nature of the piece to be mounted on the carriage, the quality and quantity of ammunition to be carried on the limber box and tumbrils, will necessarily come under our consideration; indeed without some attention to these particulars, it will be impossible to determine what would be the best construction of a carriage of any kind.

2nd, It will be our business to consider what is, in our opinion, the the best construction of carriages for a battering train of iron 18 and 24-pounders. Mortars and howitzers seem to be much out of use, and iron 12-pounders can hardly come under the denomination of battering guns, although they may be of use with an army for the defence of a camp: unless it shall be thought that long brass sixes or twelves would answer the purpose equally well, and be much easier managed; but this will be better discussed hereafter, when we have tried the different kind of guns.

In considering the above subjects of our inquiry, I think it might be of use, when we meet, if the members of the Committee (who may choose it) were to give in their remarks in writing, of what has come under their own particular experience and observation; keeping as close to that as possible, and avoiding all visionary disquisitions; the Committee can then proceed to deliberate

upon each of the particulars, and adopt those opinions only which are approved of by the majority, assigning at the same time, their reasons for the further information and approval of the Commander in Chief and the Military Board.

In discussing the differences of opinion concerning any particular part of a carriage and limber, it may be necessary to make some experiments for our own satisfaction, and therefore it will be proper to address the Secretary of the Military Board, to obtain their authority, for what materials or assistance we may want for this purpose.

The above being agreed to, the following letter was written to the Military Board, and their answer received.

To Captain George Robinson, Secretary to the Military Board.

Sir,

I am desired by the members of the Committee, ordered by the Commander in Chief to take into consideration the proper construction of gun, carriages, &c. to address the Board through you, that we may obtain their authority for what materials we may want from the arsenal, to make any experiments that may seem necessary, to ascertain the strength of that particular part of a carriage, concerning which we may be in doubt. Colonel Deare has promised us any assistance we may want from the artificers in camp.

I have the honour to be, Sir, Your most obedient humble servant, (Signed) D. WOODBURN, Major,

Camp, Dum Dum, January 15th, 1793.

President to the Committee.

To Major Woodburn, President of the Committee for inspecting and reporting upon the construction of Gun carriages.

Sir,

I have the honour, by direction of the Military Board, to furnish you with a copy of a resolution, passed this day upon your letter of the 15th instant.

I am,

Sir,

Your most obedient humble servant,
(Signed) G. ROBINSON,
Acting Secretary, Military Board.

Military Board Office, 2 21st January, 1793.

Resolution of the Military Board, 21st January, 1793.

• Agreed that the commissary of stores be directed to comply with the requisitions that may be made in writing by the Committee, for any material they may require from the arsenal; reporting to this Board, from time to time, the articles which are supplied to them in consequence.

(A true copy,) G. ROBINSON,

• Acting Secretary, Military Board.

Military Board Office, 21st January, 1793

The Committee having met, and delivered their remarks and observations on the defects of the carriages at present in use with the Bengal Artillery, and the improvements which may be made in their future construction, are of opinion,—

That the cariages of the 6-pounders are much too heavy, and unwieldy in every respect, for field service;

but the weight, and construction of the limber, is by far the most objectionable.

The boxes of the elevating screws, by being sunk into the centre trunnions, weaken and shake them to pieces.

The extention of the pintle behind the axletree lengthens the draft between the fore and hind wheels, about three feet, and the pintle, by not traversing, tears all the trail transoms to pieces in travelling over rough ground. The height of the limber wheels throws the whole weight of the gun and its carriage back upon the hind axletree; this not only increases the difficulty of the draft, but renders it frequently impossible to turn the carriage without unlimbering the gun.

From these circumstances it was always impossible to keep up with the Infantry, in cases of emergency, which are the only situations where light guns can be of use. This happened frequently during the war; when the guns mounted on the Madras 6-pounder carriages, were not attended with the same difficulty.

Hence the Committee have agreed, that the Madras 6-pounder carriages and limbers ought to be adopted without hesitation; they had every advantage over ours in point of travelling, and none of them that we ever know of broke down.

William Stephenson, head artificer, who was with the army the whole war, says, that since he came round, he secured the iron work of a Madras 6-pounder carriage, that was burnt by accident in the arsenal; he has also the dimensions of the wheels, cheeks, &c. and is otherwise well acquainted with the construction of guncarriages in general. The Committee therefore would be glad if the Board would order a 6-pounder carri-

age of this construction to be made up, that they may be able the more easily to explain its particular advantages, and that it may serve as a model for making up others by, in case it should be approved of; or else a carriage may be sent from Fort Saint George for this purpose. They are of opinion that the limber box ought not to hold above eighteen or twenty rounds, with pouch, portfires &c. There ought also to be a till, or small division in the box, to keep spikes, prickers, and bitts, apart from the ammunition, which is not the case in the present boxes. Of the 18 or 20 rounds 6 ought to be grape; and the Committee are clearly of opinion, that the quantity or weight of the grape, should be nearly double the weight of the shot; and if the balls were four ounces, and made of beaten, instead of cast iron, they would be much superior for service, as has been proved by the best experiments.

The boxes of the elevating screws may, without alteration, be easily made to work on an iron or brass plate, upon the surface of the transom, without weakening it or taking it to pieces as at present. But when any new ones are to be made, the Committee would recommend that as a model, which is in use with his Majesty's 3-pounders, by which the screw is always kept perpendicular; but this is by no means a matter of such importance as to condemn our own, if they are properly fixed upon the surface of the centre transom.

In regard to the ammunition tumbrils which are to attend the field pieces, the Committee are of opinion that those in use are too large, too high, and too heavy for the purpose. There are also no divisions in the fore and after parts of the box, to prevent the ammunition from Being tossed and tumbled about, in travelling over

rough ground, which is very dangerous; their height makes them top-heavy, and liable to be overset, and their size contains nearly twice the number of rounds allotted to them. The frame of the box seems not only superfluous, but forms a lodgement for the water to get in at the sides, by which the lower tier of ammunition in wet weather was always damaged, in spite of the covers which go over it.

In order to remedy those inconveniencies, the Committee have made a tumbril which will carry with case 90 rounds of 12-pounder ammunition, and 144 or 150 of 6-pounder; the box is of teak plank, one and a half inch thick, dovetailed and clamped at the angles; the seams of the sides and bottom rabitted and joined with cotton and glue, to keep out water; the top is covered with light canvas, well waxed, with a ruffle to carry the water over the ledge of the lids: pitch always cracks the covers and ought never to be used. The length of the box without is 4 feet 2 inches, breadth without 3 feet, 21. height of the sides 15 inches, the front and rear ends of the box have each three divisions, two of 13 inches wide, and one of 16, for the purpose of packing 6 or 12-pounder round, and their grape which is of different dimensions. and ought to be kept separate from the round to prevent confusion. This box is both strong and secure against accidents, either from rain, or from being blown up, or from oversetting on running over rough ground; it is also convenient by being easily taken off the carriage, to be put on board of ships or boats, or secured under shades in the rainy season, which is not the case with the present in use, as was sufficiently experienced upon our embarking for Madras at the beginning of the war, and must always be attended with much inconvenience in sending tumbrils up the country by water.

There is a seat for the driver, which is very necessary, and the centre of the box's gravity may be placed so far behind the axletree, as to make allowances for the weight of him and his bundle. The wheels are those of the tumbrils now in use, only rounded off on the inside of the felloes, which without weakening gives them a much lighter appearance, and makes them less liable to be clogged in travelling over heavy ground. The step which is always subject to be broke or incumbered with baggage, is not wanted in the new tumbrils; a cover should be made use of like the present, but made of light canvas waxed.

Should the number of cattle in a cart or tumbril-be above eight, it will be proper to put four in the pole voke, otherwise in light carriages there can be no occasion for it. It is necessary to have a hook or eye to fix a drag rope to the end of the tumbril, in order to lower it down a declivity, besides the hook to the washers. The Board will also perceive the mode proposed for greasing the wheels of heavy guns, exemplified in the axletree of the tumbril, that has been made up for their inspection. The Committee have often had occasion to observe the defects of the present iron 18 and 24-pounder travelling carriages; the chief of which is the lowness and narrowness of the carriage wheels: the great height of the limber ones, the projection of the pintle behind the axletree to make room for a large limber box, which is only an incumbrance with a heavy gun. Morecver, the projecting part of the limber behind the axletree, will not bear the great force which must often be applied to it; those that were sent round were all torn and twisted to pieces, and when they arrived at Bangalore, that part was obliged to be taken off, and the pintle fixed upon a bolster to the axletree as it ought to be. But the greatest inconvenience arose from the weight of the limber wheels, which throws the whole weight of the gun upon the hind axletree, and renders it almost immoveable, as was often experienced during the war. It was also impossible to turn the carriage without taking a very long sweep.

In order to remedy these inconveniencies, the chain traces were carried back to the axletree of the gun carriage, where the greatest weight lay: this was found from trial to be of great advantage. The next experiment was to take away the high limber from a carriage that could not be got on, and try it with a low one, which always answered without any change of cattle. The next experiment was a double cap square,* which also had been tried in Europe, in order to divide the weight between the two axletrees.

Two of the improved carriages made at Bangalore, carried two of Tippoo's iron 24-pounders, which were remarkably heavy. These with very indifferent cattle, travelled full as well as any of the light guns in the park.

From the above facts it will be very easy to improve the construction of the present carriages, and the Committee propose to have an iron 18-pounder carriage made upon the following plan, for the inspection of the Board:—the wheels of the carriage to be 5 feet high with the present nave and axle; the felloes to be 6 inches broad by 5 deep, the inner angles to be well rounded off to prevent the wheels from being clogged; the limber wheels to be 3 feet high, naves, axles, and felloes of the same dimensions with those of the carriage, in case they should be wanted in a battery to supply the place of

^{*} Now called travelling trunion holes.

the others; the axletree to have linch pins and washers. with hooks twice as strong as at present; the pintle to be fixed on a bolster over the limber axle, just high enough to admit the wheel, in turning, to go under the cheek of the carriage; the trunnion plate to be deep enough to admit $\frac{2}{3}$ of the trunnion, the one for travelling to admit of 4 of it, and to be at such distance from centre to centre, as to throw 2 of the weight on the bolster; each end of the axletree, at the shoulder, to be a strong broad band or hoop, with an eye for linking the chain trace to; this trace, towards the gun, to be strong enough for the force of forty or fifty cattle, but gradually to diminish in thickness towards the leading yoke. Where there are only four bullocks to pull upon it in the trace or team, there ought to be a hook, or (S), to take off one half or more of the cattle, in case of going over a narrow bank, or bund of a tank with short turnings. In battering guns the bullocks ought to be four abreast, with yokes longer for large cattle than those that were in use with us in Mysore.

As greasing the wheels of a heavy train is not only laborious and troublesome, but also a dangerous business on account of accidents, the Committee propose that there may be a small plate on the upper side of the axletree arm, communicating with a hole from the shoulder of the axletree, into which oil, and grease may be poured at any time, without taking off the wheels. Tar ought never to be used, and is now exploded in Europe, as it forms a hard pitchy substance that clogs the wheels and occasions a great deal of friction.

It were also to be wished that either Mr. Toppin's or Mr. Taylor's contrivance for elevating battering guns were adopted. This would enable an officer to lay a gun

'with more expedition and certainty, and prevent the exposure of two men who are obliged to elevate the piece with handspikes.**

These are the principal improvements that have claimed the attention of the Committee in marching with heavy guns. Should the Board be pleased to give orders for the contractor to make up an iron 18-pounder carriage, recommended by the Committee, they will be happy to superintend the doing of it, for their own satisfaction, and that of the Board. Wm. Stephenson may be employed to advantage, in making up a carriage of the above construction, as he is well acquainted with the practice upon which it is recommended. Great pains must be taken, in making the iron axletree, for unless the iron is well wrought it cannot be depended on.

In regard to the carriage of military stores, such as balled ammunition, powder, shot, shells, intrenching tools &c, the balled ammunition ought to be packed in square boxes, like those at present in use at the upper stations. These boxes are not so liable to be broken as barrels are, and the ammunition is easily packed in them. and better preserved. They may be made of any kind of wood, at little expense, while they answer equally well to be carried on bullocks or put upon carts: indeed excepting the proportion of ammunition that attends a battalion, the Committee are of opinion that the whole Magazine of military stores would be safer, and easier conveyed on carts than by bullocks. These carts ought to be of the same light, and simple construction as the Madras bandies, with a ledge round the platform of about six inches deep; the carts to answer for either two or

^{*} Can any of your readers inform you, Mr. Editor, what were these contrivances?

four bullocks as occasion may require. These it will be found can travel in a line by themselves, on the flank of the army, and the people attending them, can always assist those in distress; the commissaries and conductors, upon coming to the ground, will then be able to make an accurate report of what is wanting; whereas this is impossible when the stores are carried on bullocks, mixed with the baggage and scattered among the jungles, as was often, if not always, the case during the war. Besides, there is always a great demand for carriage cattle in the grain and other departments, where carts cannot be used; and if it can be shewn that military stores are better conveyed on carts, and with at least one half of the cattle, it will certainly be a sufficient recommendation of this mode of conveyance in their favour.*

We come now to consider the nature of guns; and if the question involved nothing more than the most easy management and expeditious movement of light or heavy field pieces, the Committee could not hesitate a moment which to prefer, as the superiority of the first in these instances must be obvious to every one. But the peculiar service in India requiring the longest ranges of the several field calibres, beyond every other consideration, renders this a question of most serious deliberation: and the more so from the unsettled opinions of professional men, which of the two constructions, the long and heavy, or short and light, is most likely to obtain this end.

Ever since the introduction of light field pieces, it has been maintained by one party and denied by another, that long guns carry considerably farther than short ones of the same calibre; and to this maxim of the su-

See Article II, No. IV, of the present work. Ed.

perior range of long guns, from their length, is joined the theory of M. Belidor, that they carry farther from their weight, as a heavy gun having less recoil than a light one, it becomes a reaction to a great part of the inflamed powder, which having struck on its breech, returns and augments the force of that part of the inflamed charge which impels the ball.

Opposed to these principles are actual experiments; and the theory of M. Belidor is combatted by M. Bezout. Our neighbours abroad, and Mr. Hutton at home, have found from repeated experiments, that long field pieces of the same calibre, have very little advantage of range over the short, from their length; and M. Bezout proves that they have none from their weight: for, in his course of mathematics, it is demonstrated, that if two guns were made of equal length, but one of them a third less, as to weight, and the lighter loaded with as great a charge as the heavier, that their ranges would be of equal distance, and that the lightness of the piece does not diminish the velocity of the ball. Yet notwithstanding the reasoning and experience of such able men, inveterate habits, and the fashion of the present day, keep the question in suspense. The Committee can go so far to fix the question, as to declare, that from their own experience they find the latter doctrine just: for at Dum Dum in 1787, a course of experiments, as recommended by Mr. Muller in his Artillery, were made with a long heavy brass 6-pounder cast on purpose, weighing 10cwt. 24lb. After a certain number of rounds were fired, a part of the gun, equal to its diameter, was cut off, and the same number of rounds fired with the diminished length. The gun_was thus diminished, diameter by diameter, and fired until it became

so light as to weigh no more than 3cwt. 3qrs. 2lb. the result was as follows:—

That of the first sixteen lengths, the 7th carried the farthest, throwing the ball to the distance of 2305 yards on a medium, the gun weighing 8cwt. 2qrs. 20lb.

That at the fourteenth length it threw the ball to the distance of 2098 yards on a medium, the gun weighing 6cwt. 1qr. 3lb. this is about the weight of the clumsy 6-pounder cast in the country and in present use.

That at the 17th length it threw the ball to the distance of 2106 yards on a medium, the gun weighing 4cwt. 3qrs. 23lb. this is about the weight of the 6-pounder cast in Europe, and formerly in use in this country.

That every other length below the 17th, threw shorter.

Hence it appears that the six first lengths, though longer and heavier, did not throw the shot so far; and that the 7th length (the best of the first sixteen) though much longer than the 17th, and nearly twice as heavy, did not exceed it above 199 yards in the extreme range.

Again, at Dum Dum in 1793, a course of experiments were made with his Majesty's long, and the Company's short 3-pounders, both made in Europe. The long gun measured in length of bore 5 feet 3 inches 1, the weight was 6cwt. 0qr. 8lb. The shorter was in length of bore 3 feet 4 inches, weight 3cwt. 3qrs. nearly as light again; the diameter of the bore was nearly alike in both. When those guns were fired with a charge of 1lb. 4oz. and thirty minutes elevation, the long gun gave a range of 1734 yards on a medium, the short gun gave a range of 1644 yards on a medium, the difference in favour of the long gun was 90 yards.

When they were fired with a charge of 11b. 8oz. at fifteen minutes elevation, the long gun gave a range of 1677 yards on a medium, the short gun gave a range of 1602 yards on a medium: the difference in favour of the long gun was 75 yards.

The first grazes of both guns were nearly alike in these charges.

It is to be noted, that when either guns were loaded with 1lb. 8oz. (or half the weight of the shot), it threw shorter than when loaded with a less charge, viz. 1lb. 4oz. Now as the ammunition which accompanied the King's gun from Woolwich, has no higher weight than 1lb. 4oz. in any of the cartridges, or marked in any of the lists pasted on the inside of the ammunition boxes, it is to be presumed, that they experienced this remarkable circumstance at home, and accordingly fixed on the 1lb. 4oz. for the fittest charge.

This is an invincible argument against the introduction of heavy guns; for the reason, among other bad ones, for the great surcharge of metal is to render them strong enough to bear a larger charge; but the experiments above recited, shew that a quantity of powder, beyond a certain measure, by increasing the velocity of the ball, increases also the resistance of the air, and the heavy gun which discharges a shot under these circumstances gains nothing but a shortened range, and unmanageable weight.

The Committee from the above premises, do not hesitate to recommend the light and short field pieces, such as were formerly in use, weighing 4cwt. 2lb. of European manufacture, in preference to long and heavy ones of the same calibre. They ree nothing to recommend the latter guns, but the solitary advantage of about 200

yards of increase in the range for a 6-pounder, and 90 yards for a 3-pounder; and as the uncertainty of striking so small an object as a line of men presents, at the distance of a mile and upwards, is so very great, this advantage at best is but random, and surely considerably overbalanced by the unwieldiness of the piece, the tardiness of its movements, and the expense of additional lascars for its service and cattle for its draft.

As the Committee have thus decided on the general question, that short and light field pieces are best adopted to the service, it remains, to determine the particular question, whether 3-pounders or 6-pounders of this construction be the most advantageous.

A 3-pounder has pre-eminence over all other field pieces, for facility in manœuvre and economy in the ammunition and draft. But the Committee, keeping the nature of the service in India stedfastly in view, see these profitable qualities rendered of no avail by many essential defects; for they find the range of a 3-pounder. long or short, to be less than the distance which the enemy, (who generally has the choice of battle), choses to engage from; so that an establishment of such guns would lumber the army with a train they could never bring into action. The momentum of a 3-pounder ball is so little after the first 1000 yards, that almost every stone or stump of a root (which a large ball would dash to pieces), will impede its progress or deflect its direction; · it also requires a quicker sight than most men have, and a clear horizon, to see the graze of a 3-pounder ball at any considerable distance, the gunner therefore can seldom correct his aim.

The last argument is derived from the constitution of mind in the enemy we have to encounter. It is well known to every officer conversant with the natives of this country, that in relation to guns and shot, they estimate danger by size and weight; and a ball of larger diameter, by its hollow percussion of the air, and the dust it raises in its approach, is not only dreadful where it falls, but terrible to a distance; whilst a 3-pounder ball, though as sure to destroy as a heavy shot, yet, passing along, hardly seen and scarcely heard, is little regarded but at the yery place it strikes.

The Committee taking these reasons into consideration, recommend the light 6-pounder to be the established caliber for the battalion guns, as the most advantageous of the two.

They also recommend the total abolition of 12-pounders, as field pieces, attached to corps in the line, from their unmanageable weight, and the great expense of their ammunition and draft; but as our camps are liable to be insulted by the enemy, who bring down large calibers, and are thereby enabled to cannonade from a great distance, they think it necessary that a certain number of 12-pounders should be in the park, to be drawn out on such occasion. And their choice falls on this caliber in preference to larger, on principles of economy and equal effect; as its range is known to be little short of our 18-pounder, and the expense of its charge, taking every thing in, not more than half. They further recommend that these guns be iron, and carron-made, as they may be used in batteries to take off defences, and run no risk of being spoiled by constant firing. With respect to battering guns, the Committee are decidedly of opinion, that none but iron 18-pounders, carron-made, should be ever brought into the field: for the momentum of an iron 18-pounder shot, is sure and expeditious

enough to bring down the strongest wall, and the saving in ammunition between this and higher calibers is very great, not to mention their advantage in marching.

It does not appear that there are any of the new carron-cast guns, solid-bored, and turned on the same centre in Fort William, which is a serious circumstance in case of service; as the Committee, from what they have seen of the iron guns in garrison, are far from having a favourable opinion of them. Many of them are old guns, very rough, with a great deal of windage, consequently uncertain in the direction of the shot, and the metal is not to be depended upon in case of much firing. It were therefore to be wished that we had, as they have at Madras, a number of new carron 12 and 18-pounders that might be depended upon, in case of service. This much the Committee conceives to be their duty, as professional men, to point out to the Board, and they hope it will not be deemed importinent or officious, because the order appointing them to sit, does not particularly direct them to give an opinion concerning the nature of guns.

ARTICLE III.

Remarks upon the fortress of Allygurh,

To the Editor of the Military Repository.

My DEAR SIR,

A stay of a few days at Allygurh, has enabled me to carry into effect a project, long in contemplation, relative to the revetement, or, rather, demi-revetements in this fortress. The mere appearance of the profile would have convinced me at first sight, of the total impracticability of the revetement being sufficient to sustain so large a mass of earth; but had not my stay been much longer than I had at first expected, I should probably not have been led into the following calculations which will, I trust, prove satisfactory, and evince, to a certain degree, how, not only the laws of gravity and theory of revetements have been violated, but that the simple action of earth to find its natural slope, and when impeded, to exert a power in proportion to its solidity in finding that slope, has been rejected, or forgotten. To illustrate this I bog leave to forward a few sections of the profile of the rampart.' (See Plate 19). No. 1. shews the rampart with the parapet as it formerly stood; the latter, however, having been thrown into the ditch to lessen in a small degree the weight and pressure on the revetement, has been added in dotted lines to my section, merely to shew the actual state of things as they formerly existed. In case the dimensions of this parapet should be in any way incorrect, I have not admitted

it into the calculations, but have confined myself to a simple inquiry into the stability of the revetement as it stands at present.

It is a matter of the greatest surprise to me, how the masonry could have supported this mass of earth, in a proportion of nearly 7 to 1, for so long a period; with merely a berm of 2 feet, and every thing promoting to bring the centre of gravity as near the masonry as pos-When we took the fort from the Mahrattas, the rampart was surrounded by a faussebraye having a loop holed wall in front, and consequently was considerably inthe rear of the revetement. To this circumstance alone I attribute the stability of the masonry. It appears, however, on our taking possession of the fort, that the removal of this faussebraye was considered necessary, and Government was at a considerable expense in moving earth to form a rampart, as per section, leaving a berm, as I said before, of two feet, and forming a parapet at its summit, adding at least 60 superficial feet to the additional press of earth caused by the projection of the rampart on the masonry.

Agreeable to Vauban, whose authority will be deemed conclusive, and whose experience on these matters, is a sufficient guarantee for their durability, "The base of a partial or demi-revetement, including counter-forts, is to be equal to that of a full revetement calculated for a profile of the same height and scarp." Allowing therefore that the revetement of the present profile was 20 feet, agreeable to the above scale we should have the width at the base 13 feet 4 inches, and at the top 9 feet 4 inches, with a mean breadth 11 feet 2 inches, together with counter-forts, 10 feet long, 6 feet wide, if rectangular, otherwise 6 feet at root, and 4 feet wide at tail, which he proves sufficient

to support a weight of earth pressing against it in the proportion of 40.85 to 100 nearly, or as 1 to 2, the masonry having a slope to the front of \(\frac{1}{2}\) of its height. In our present figure we have a revetement containing 160 superficial feet, supporting a mass of earth equal to no less than 710.01, or as (sect.1,) a b d m. to the right angled triangle a n e. nearly, with merely a slope of \(\frac{1}{10}\) in front, and not a counter-fort!

Allowing even that the old hypothesis, "that earth of common tenacity supports itself at an angle equal to its height," is untrue, and that, with Colonel Pasley, the irregular figure a g h e. instead of acting with the body of earth g b d f h. in overthrowing the revetement, acts as a wedge or fulcrum to the base of the masonry, described by the right angled triangle m a g.; allowing this to be the case. there will be a mass of earth g b d f h. containing 468.10 superficial feet, acting, in opposition to a g h e. with a very great tendency forward, the masonry in that case being as 126.25 to 226.19; allowing for a deduction from the whole body g b d f h. equal in solidity to a g h e. to balance the same. As however the whole mass g b d f h. is supposed to act in a body with a lateral and partly vertical pressure on the masonry m g b d. which is united en masse with the triangle at the base, we cannot deduct, any portion in opposition to the fulcrum aghe, which acts almost perpendicularly, though in an oblique direction on the base ma. resisting on account of its foundation, any tendency to move forwards. Therefore the irregular figure mgbd. will actually have to support the whole mass gbdfh. or 468.10, a pressure of 4 to 1 nearly. Again, it must appear evident on referring to the section.

and agreeable to the above hypothesis, that the masonry of the revetement has to support a body of earth equal to the whole triangle an e. as the difference between the two small triangles d p b. and p n f. is inconsidera-The suppresition entertained that the right angled triangle d p b. acts as a support to the masonry in a vertical direction, is as erroneous, I conceive, as the possibility of deducting an equal portion of earth from the mass g b d f h. to counterbalance the effects of the trapezoid a g h e; for in both cases it is a mere particle of a body, tending either vertically or obliquely to the ground or level, and consequently must act as the superior or overwhelming force directs. The triangle d p b. although not acting in a lateral direction to overthrow the revetement, still adds weight equal to its dimensions in the full: this I trust will be sufficiently clear. Moreover, in a very tenacious soil, or what would stand at 60°, (whereby the angle m g a. would become very acute,) I consider that the weight of earth acting against the masonry in opposition to the prop a g h e. would carry the revetement into the ditch, bearing down the triangle m a g. at the base with it.

This must take place, agreeable to a proposition on which the theory of walls has been founded, viz; "that the wall is supposed to be one single stone, so that if a sufficient power were to be applied it would break off at the root", and as I believe all mathematical calculations and theories laid down, are founded on this hypothesis, should experience and ocular demonstration point out to the contrary, their whole weight must fall to the ground. The very first supposition in the theory of revetement seems to be perfectly erroneous, and the postulate above mentioned is more so, as there is little-

possibility of the masonry of a revetement ever obtaining the consistency of a single stone. A theory founded on these two hypotheses, can prove of little use, and as Colonel Pasley observes, "must be looked upon as mere speculation, on which no reliance could be placed in practise."

In the commencement of my letter I mentioned the existence of a faussebraye round the rampart, at the time that we took possession of the fort, what were the dimensions of this work I am not able to say. We will, for sake of experiment, say about 16 feet from the rear of the revetement, at the point o. Sect. 1. Now supposing this point terminated the exterior slope, according to our present theory, there would be merely the right angled triangle g b o. having a tendency to overthrow the masonry with exactly the original trapezoid a g h e. acting in opposition, and sustaining the base of the revetement, which, weak as it is, and unsupported throughout with counter-forts, would, I conceive, have remained entire and uninjured, had the profile remained in its former state.

The proposition laid down by Colonel Pasley, viz. that the figures a g h e. and g n h. act towards one another in the same manner as a pair of scales, and that the stability of the masonry is as the weight of earth in the trapezoid a g h e. in proportion to the upper portion, is, I think, most happily substantiated, in a great degree, by the section 2 of the rampart before us. The dotted line 1 k. represents the slope formed by the sinking of the revetement, the upper part of which is pushed forward into the ditch, by the excess of weight pressing on it. A direct line 1 k. will be nearly if not parallel to m h. the line of separation between the two

opposing masses. As however the tenacity of the soil of which the rampart is composed, is much greater than the preliminary hypothesis allows, the line in h. would probably be at an angle m k, the irregular figure a o k h. would be therefore opposed to the mass o b d f k. and, as is proved by the figure, the lower portion of the revetement mao. has remained in a state of rest, whilst the upper part has been impelled forward into the ditch. Still the weakness and unstable profile of this work will hardly be received as a proof of the above theory; as many other latent causes, either in badness of masonry, mortar, and most probably the action of the saltpetre (with which the earth is impregnated) on the cement, may have added most principally to the fracture at the point w. instead of having torn the whole revetement from the foundation. Many instances have occurred, similar to the above, of reveted works having given way, chiefly owing to the foundation being laid on a bad soil. This I believe to be the case at Allygurh, though the immense weight of rampart is sufficient to warrant the accident; it would however be advisable to be satisfied on this point, previous to the commencement of a new revetement.

Having endeavoured to prove the present instability and weak profile of the revetement in question, which I trust will be acceded to, I now come to the proposed alteration, formed on the simple plan of the old fort with its faussebraye. Sects. 2 and 3. will explain what is meant, without entering further into the subject; and either of which, if adopted, would remedy every existing defect, and prove at the same time, an inconsiderable expense to government. My wish to render this alteration as cheap as possible, has prevented my making any

attempt at new modelling the revetement: although it would be as well to add counter-forts, where the masonry has actually given way, 4 feet length, and 4 feet breadth; or in lieu of these, a counterslope of 1, or 1, with the foundation projecting at least 11 feet in front: this addition would I think be of service in supporting the whole of the masonry on that face. Sects. 3 and 4, (See Plate 20) appear to me to be the only reasonable method of removing the defects of this revetement, but as the interior of the place will be diminished,* nearly 20 feet on each side, considerable defects arise even from this, which, however, are trifling in comparison with the expense and trouble arising from continual repairs required by the giving way of the masonry. The breadth of the rampart could not be diminished with any propriety, as the terre-plein in that case would become too contracted.

As rain and moisture of any sort have a very great tendency to overthrow the strongest works, if allowed to settle at any point, I should recommend the terreplein of the rampart to have the usual slope, and not to be left horizontal as at present, and the faussebraye or berm do. to have drains with their mouths about 5 feet in the rear of the revetement, built of strong pucka work, and passing in an oblique direction x z. (Sect. 4,) through the revetement. This would add in a small degree to the strength of revetements without counter-forts, and would also destroy all ill effects likely to arise from water concentrating on the berm.

Sect. 4. possesses an advantage over Sect. 3, by having a counterslope of $\frac{1}{6}$, or $\frac{1}{6}$, which effects an increase of

The interior area of the bastions will be diminished in a much greater proportion, of course.

fulcrum, and a considerable diminution in the opposing triangle b g o.* A small parapet on the crest of the revetement would rather increase the stability, and would also afford cover to troops during a siege. The princicipal defect in a faussebraye being counterbalanced by the low angle of the slope, h o. which being unreveted and at its natural slope, would withstand the effects of shot for a considerable time without choking up the faussebraye.

The above remarks I trust to be well founded, and hope that you will make whatever use you please of them, altering them to any form that you may think better adopted to clearness and perspicuity. The measurements of the slopes were taken with a common plummet and string attached to a rod divided into feet and inches, and a simple 2 feet rule, which will be a sufficient apology for any small error that may be discovered in the Sections.

Allygurh, C.
April 14th, 1824.

It is with extraordinary gratification that we give place in our pages to the communication of C. and justly may the Professors of Addiscombe take pride to themselves in having sent to us such a pupil; for our correspondent joined the Bengal Artillery from that seminary.

We applaud the professional zeal which has drawn forth the present letter, and admire the science which the writer has displayed; these must lead the individual

^{*} On the supposition that counter-forts are not used!!

on to an honourable and distinguished career in his profession, which we earnestly trust he will long enjoy.

We feel it incumbent on ourselves, however, to offer a few observations on the present occasion; these will, we trust, shew the necessity of attending to localities in the adoption of European theories in India, and they will we hope be in aid of our arguments offered in No. III of our Repository, Article II, as to the advantages of having officers who have served in India, at the Military Seminary of Addiscombe.

Our observations will be offered in as brief a space as possible. In the upper provinces of Hindoostan, the almost general use of unburnt earth and brick, in the construction of walls, whether for domestic uses or for fortresses, and the amazing solidity of these walls, can hardly have escaped the notice of our intelligent correspondent.

We have seen many interior walls of Officer's bungalows, of only 2 feet in thickness, (sometimes only 18 inches), raised, of unburnt brick laid in mud, to the height of 45 and even 50 feet. Yet, though built of these humble materials, their solidity and tenacity is such, that large openings for doors, or other purposes, may at any time he cut through them, without any apprehension as to the stability of the superstructure.

We recollect at Mutra in 1810, the walls of the deserted bungalows of the Officers of His Majesty's 17th regiment were standing without any roof upon them during a whole rainy season. All attempts to separate whole bricks from these walls were unsuccessful; though built with unburnt bricks laid in mud, each wall was one compact solid.

Some of these deserted walls were roofed in a second time, and though large orifices had been left in them, from whence door frames had been removed, and other door ways were made by the new possessors, by cutting through the solid walls, without the precaution of turning an arch over the openings; yet we cannot recollect an instance in which any failure of the walls occurred in supporting the roofs placed upon them.

The heavy rains made very little impression on the uncovered walls, and we believe no walls fell during the first year, though they were gradually thinned, by the rain beating on the monsoon side and dissolving a portion of their thickness. The theories of the pressure of earth, and of the necessary resistances to be opposed to this pressure, when employed in military works in Europe, can only he applicable here with certain modifications, and with due attention to localities.

The native fortresses of the upper parts of Hindoostan are built in a rude kind of "Pisé;" the small slope of the profile of their high walls and bastions would astonish the scientific European Engineer; and he might readily suppose that a few rounds from the breaching battery would crumble them to dust, fill up the ditch, and render the assault comparatively easy.

Nice calculations have been formed from data, obtained from actual experiment, as to the quantity of pressure which a square inch of wood, brick, stone, cast iron &c. will bear before their integral parts are crumbled; but these calculations will not apply in direct ratio, when the bearing superficies is extended. A brick of 12 inches by 6, will bear at least 100 times a greater weight than one square inch of the same substance exposed to pressure; whereas the calculation furnished from experi-

ment made upon the single square inch superficies, would only allow of the brick bearing 72 times the load. Let any one try the experiment and convince himself.

But the above remark does not apply altogether to the present question, we are merely speaking of certain materials employed in a certain climate. "En Pisé" mode of building has been introduced into England, in a scientific manner from Italy. The stability of the unburnt earth buildings, if the walls were carried to any great height in England, we much doubt: the first severe frost and its successive thaw, would undoubtedly affect them. But here we have no frost to dread, and the compactness of the soil is such, that the rain only penetrates an inch or so below the surface. in situations where the water is speedily drained off. We speak from fact; almost every flat roofed native building in the upper provinces, and many European houses, have only a compact mud roof,* laid as horizontal as possible. Yet, if well made, these roofs seldom leak, nor is any dampness perceptible in the ceiling after the most heavy rains.

Here, again, we must differ from our friend C. in his opinion that the terre-plein of the rampart of Allygurh should have the usual slope. In our opinion the Engineer was right in making it flat; and that it should be as horizontally flat as possible, we consider essential to its durability; unless the surface is protected by masonry, from the effect of the heavy rains: for, it is well known that if a mud roof is made with an inclination to the horizon, with an idea of throwing the rain

^{*}A composition of clay, cow-dung, and chopped straw or Bhoosey, is generally used.

off more speedily, the inhabitants of the building are liable to be soaked through in the rainy season.

We will conclude our remarks however by observing, that all we have said does not in the least weaken the exposition of our correspondent, with regard to the revetement or demi-revetement of Allygurh. The fort of Allygurh stands low, and, as far as we remember, the ditch has water in it nearly all the year round.

Here is a situation therefore in which the solidity of an Indian made cutcha wall is of no avail. The constant moisture imbibed by the ramparts from the wet ditch will totally prevent the induration of the soil, and the pressure must be resisted by the application of the scientific rules which our correspondent C. has so clearly and judiciously explained.

But with regard to ramparts above the level of direct moisture, our observations apply, and we feel assured that they will receive the due attention which they require.

We trust that our intention in offering these observations will be properly understood by our esteemed correspondent, whose further communications on professional subjects we earnestly solicit. Ed.

ARTICLE IV.

Colonel Skeene's Instructions for Cavalry Drill.

To the Editor of the Military Repository.

Sir,

Having brought with me, from England, a copy of an excellent little work, written by the late unfortunate Colonel Skeene, entitled, "PROGRESSIVE MILITARY INSTRUCTIONS FOR FORMING MEN AND HORSES IN THE RUDIMENTS OF CAVALRY SERVICE," a work which has been held in great esteem in England, I feel that I am only fulfilling my duty to this service, by forwarding the work to you, in hopes that you will reprint the same in the Military Repository.

Captain Skeene was Riding-master of the depôt at Maidstone: under his superintendance, nearly the whole of the cavelry recruits, who joined the armies in the late glorious operations in the Peninsular and on the Continent, were trained.

At the return of peace, Captain Skeene was offered the command of a regiment of Lahcers in the service of the Spanish Independents, in South America, and unfortunately for himself and his family he accepted the appointment.

He sailed from England in November 1817, in the Indian, a fine vessel, completely equipped, and having on board a number of distinguished officers, embarked in the same cause, with complete equipments for several corps of cavalry.

The day after the Indian sailed, a violent gale swept to destruction a number of vessels in the British Channel. The Indian was driven on the coast of France, and every soul on board perished. Such was the fate of the meritorious individual, whose admired mode of instructing the cavalry recruit, is delailed in the following pages.

I am Sir,
Your obedient Servant,
A. Z.

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FIELD MARSHAL

HIS ROYAL HIGHNESS

THE DUKE OF YORK,

COMMANDER IN CHIEF OF HIS MAJESTY'S FORCES.

&c. &c. &c.

SIR,

YOUR ROYAL HIGHNESS having condescended to honor this small BOOK of Instruction with your sanction, is a further proof that your ROYAL HIGHNESS is at all times graciously pleased to bestow approbation on those who exert themselves for the good of the Service.

Although conscious of being unequal to the task of offering this BOOK to the Public, yet I hope, that at a future period, your ROYAL HIGHNESS will find the Service has derived some advantage from it. If so, I shall ever feel the highest gratification.

I have the honor to be, with sentiments of the highest respect,

SIR,

Your ROYAL HIGHNESS'S
Most devoted, and
Most humble servant,
ROBERT SKEENE.

PREFACE.

THE situation in which the author has been placed for many years, has given him a greater opportunity of ascertaining the effectual mode of Instruction, for forming men and horses for cavalry service, than probably falls to the lot of any individual in this country: with the utmost attention, he has selected simple, and expeditious methods, which have given general satisfaction; those found to succeed, have no pretensions to high manege, but are entirely confined to what is conceived, a man and horse should be perfected in, previous to their joining squadron.

These methods are formed into easy progressive lessons, which, if strictly adhered to, will be found to produce the desired effect.

The author takes the liberty of recommending the same to those employed in the riding department, assuring them, it is not from vanity he has made them public, but from a real desire of assisting, in bringing that important concern to a uniform system, which will enable those employed, to discharge this arduous duty with satisfaction; as well as insure all recruits, and horses, to be uniformly trained for squadron, and rendered capable of receiving further instruction (either in the riding house or field) that may tend to accomplish a higher state of discipline: which is presumed, will prove beneficial to the cavalry service.

PROGRESSIVE

MILITARY INSTRUCTIONS,

&c. &c. &c.

PART I.

INSTRUCTION OF THE RECRUIT.

Position previous to Mounting.

THE Recruit to be placed on foot, upright, with his heels together, in line with his horse's fore feet, and close to his shoulder; his right hand to the* bridle rein, his left arm straight, having a switch in that hand.

MOUNTING

Words of Command.

Prepare to Mount.—Motion 1st. Face to the right on the left heel, taking the centre of the rein with the fore finger and thumb of the right hand, placing the little finger of the left between, resting both hands on the horse's withers; the right one uppermost.

2nd. With the right hand carefully draw the rein upwards through the left, till the horse's mouth is lightly felt, then let the spare part of the rein fall on the off side of his neck, and with the right hand put a lock of

mane into the left, raising the right elbow the height of the shoulder.

3rd. With an upright body* make a half face to the right, on the left heel, drawing the right foot back four inches; at the same time with the right hand take the stirrup leather close to the iron, left foot in the stirrup, and right hand to the cantle of the saddle.

Mount.—1st. Give a short spring on the right toe, bearing well on the mane, and cantle of the saddle; quickly rise upright in the stirrup, with the heels together and body erect.†

2nd. With the body well back, raise the leg sufficiently to clear the horse's croup, and get square into the saddle, quitting the mane, and the right arm straight, with that hand behind the thigh.

RECOVER SWITCH.

1st. Wit's the right hand close over the left, take hold of the switch.

* With a formed dragoon, of course these three motions may be done as quick as possible.

If the carbine is on the swivel, it must be put over the bend of the saddle, (muzzle downward,) on the stirrup being taken.

- † In the act of vising in the stirrup, the mane should be kept fast; as letting it slip, and bearing on the rein alone, would not only disturb the horse, but might occasion an accident, by pulling him backward.
- * After a little practice, the man will not be required to remain standing in the stirrup, but the instant he finds his knees straight, get quickly into the saddle.

To assist his coming in lightly, he should bring his right hand from the cantle, to the pommel, and on the seat being gained, removed behird the thigh. 2nd. Bring it perpendicular, in front of the right eye. Hands even, twelve inches apart, and clear of the saddle.*

PLACING THE RECRUIT.

The recruit must be placed exactly in the bend of the saddle, his body well up, and the small of the back a little bent; the thighs should be turned inward as much as possible, without constraint, the knees straight without stiffness; and a little pressure on the heels, to ensure their being kept as low as the toes. The reins to be divided, one in each hand, twelve inches apart, and clear of the saddle; all the fingers, except the little ones, to be in front of the reins, thumbs upward, and firmly laid on them, to prevent their slipping. The length to be such, that the rider may feel the horse's mouth on each side, the spare part to be thrown forward, the wrists to be straight, and switch upright. Elbows close to the body, and in line with the shoulders.

LESSON I.

For One Day; to continue Half an Hour.

THE squad is supposed to consist of nine men; ‡ after being mounted, and placed as directed, they may be

^{*} The squad should now be allowed to sit at ease, and directed to put their switches under their left arm; whi.st they are employed in putting up the stirrup, and adjusting the reins, &c.

[†] In placing a beginner, particular care must be taken not to use force; as a young person (by being often carefully placed) will soon acquire the proper attitude.

The instructor should place one hand to the learner's knee, and the other to his heel; then gently draw the thigh down, turning it toward the saddle.

[†] It is presumed that one instructor is fully capable of managing nine recruits; however, eighteen may be put in one circle, provided

put in motion, (of course at a walk) by turning to either hand; and the better to get them into a small circle, the front horse should be led once round, directing the others to follow, at a horse's length distance from the one immediately before them. After they have walked the circle a few times, and seem to understand the given distance; they should be turned inward, halted, and again carefully placed.

It must now be clearly explained to them, how they are to turn their horses; that both hands are to be inclined the way they are directed to go, without opening the arms from the body, or leaning forward, at the same time close the leg they are turning towards;* also explain what is to be done at the word "March," (which must immediately follow,) that both legs are to be pressed to the horse, without rising, or opening the knees from the saddle; at the same time lowering the hands a little, keeping the body well back.

In going the circle, the squad should lean a little inward, with the hand on that side a little lower than the other; and the inside rein somewhat shorter, so that the horses may look the way they are going. As they go on, they should gently feel their horses' mouths from hand to hand, and endeavour as much as possible, to retain the position in which they have been placed; the instant they are found to lose it, they must be halted, and their seats, &c. carefully renewed. † The circling

there are two teachers. The senior, of course, will give all general words of command.

[•] In general, the horse should be turned on his own centre; cir cumstances however, frequently require their being turned on either fore, or hind feet.

[†] At first the squad should never exceed ten minutes without placing, for which purpose, it would be found advantageous to turn

should be equally made in both directions, and at the expiration of the given time, turn them inward, and regularly dismount as directed.

N. B. To prevent accidents, the squad should lead their horses to the stable.*

DISMOUNTING.

Return Switch.—Motion 1st. On the word "Return" being uttered, put the right hand rein into the left, and at the word "Switch," (with the right hand over the left) deliver the switch into the left hand.

2nd. Quickly remove the right hand behind the thigh.

Prepare to Dismount.—1st. With the fore finger and thumb of the right hand take the spare rein.

2nd. Shorten the rein, by slipping the left hand near the mane, and with the right hand put a lock of mane into the left, then quickly place it on the saddle, before the right thigh, (fingers directed downward) at the same time quit the right stirrup.

Dismount.—1st. Sufficiently raise the right leg, to clear the saddle and horse's croup; at the same time remove the right hand to the cantle.

them inward, when the instructor will at once observe what assistance they require.

* This should be invariably done, till the squad is capable of wearing spurs.

The horse may be led on either side, it is proper to use them to both. The hand he is led by, close to the bridle, fore finger between the reins, and the other hand employed with the spare rein, and switch, (if used) keeping close to the horse's shoulder.

† At first, stirrups need not be given, but at once spring to the ground on the word "Dismount."

A formed Dramon will perform these motions as quick as possible, and if the carbine is on the swivel, put it behind the body (butt downward) at the last motion.

2nd. Step to the ground (of course with the right foot first), turn to the front, and take the rein with the right hand.*

' LESSON II.

For Five Days; Half an Hour each Day.

THE squad should be brought in file to the riding house, and delivered to the senior instructor; who will regularly inspect, and mount them as directed: and after repeating the method of turning, commence circumg.

As they move on, the instructor should in a distinct, a degreed tempered manner, explain what the squad must particularly attend to viz.

That they are to keep the distance of half a horse's ingth, to feel their horses' mouths lightly, from hand to had d, to keep the body well up, the chest forward, arm; close, and elbows in line with the shoulders: the outward hand to be a little higher than the other, and switch upright: to lean a little inward, keeping the neels well down, and as much as possible, turn the thighs toward the saddle.

When the squad begin to understand what is required, and able to keep a little in form, they should be put into a gentle trot: which will be done by the same aids as directed in Lesson the 1st, at the word "MARCH." Care must be taken in closing the legs, not to raise, or open the knees from the saddle, or allow the body to come forward.

^{*} After a little practice, the men need not remain at the second motion, but the instant the heels come together, step to the ground.

There should be no stiffness, or contraction about the recruit, but every part as easy as possible, allowing the small of the back to yield to the motion of the horse; keeping the upper part of the body and arms steady, attentively pressing the inward part of the thighs to the saddle, and get by degrees as much down in the fork as possible. A constant pressure on the heels will assist in strengthening the seat.

The leader must be very regular in his pace, each man looking his own height, and over his horse's head, observe the way he is to go.

They must be directed to guide their horses toward the outside of the horse immediately before them, otherwise the circle will soon become too small.

The instructor should bear in mind how much he assists the learner, by often placing him, especially during the first lessons; on this the man's figure greatly depends: after placing, the squad should again be put in motion, at a walk, and endeavour to gain the trot, at the same instant (on that word being given); continuing it, till the given time is expired, then walk, halt, be regularly dismounted and dismissed.

LESSON III.

For One Week; Three Quarters of an Hour each Day.

The squad, on being regularly mounted and well placed, will begin circling, and after a few turns at a steady walk, fall into a slow trot. It will again be necessary to repeat the particulars to which they must attend. As they are found to improve, increase the pace, but never exceed ten minutes at a time, without either falling into a walk, or at once Halt; and repair the Seats,

&c. During the walk, they should be frequently halted, and again moved forward, by the word "MARCH."

To Halt, the reins must be suddenly felt from hand to hand, (but not severely) keeping the body well back, and when the horse is found to obey, ease the reins, and be steady.

They may also from a walk, rein backward a few steps, by feeling the rein, with the body well back; and at the word "Forward" ease the hands, and close the legs. In reining backward, the rider should endeavour to keep the horse straight, chiefly with the hands; either of the legs however, may be gently applied, to prevent his turning; they must also attend to the given distance from the horse before them. At first, little reining back will be sufficient, it must be done slowly.

The squad should also be turned about inward, and at the word "Forward," continue circling.

After walking and trotting well, to both hands, they may try to passage, by being taken singly to the wall, and endeavour to get a few steps to right and left.

To do this, both rider and horse should be placed facing the wall, and perfectly square. At the Caution, "To the Right Passage," turn the eyes that way, raising the left hand a little, and at the word, "March," first feel the right reia, then incline the left hand to the right, which will make the horse cross his fore legs, and by gently applying the inside of the left leg, (with the heel well down) will make him cross his hind ones; by which means, the fore, and hind legs, will move alternately; at the word "Halt," close the right leg, and hands even, but keep the eyes steady to the right, till the word "Eyes Front." Of course the opposite aids will be given, in going to the left.

The squad may also try it together, at a horse's length distance; it must be done very slow, taking care not to close their files. They may be gently reined back a few steps, dressing by either flank, and brought un again; afterward, turned to the Right, and Right about, Left, and Left about; strictly observing the instructions on that head; especially, that the arms are close to the body, the upper part of which must be kept well back.

Finish, (after going large* a few turns;†) by turning inward, and regularly dismounting as directed.

N. B. In future, the squad may wear spurs.

LESSON IV.

For One Week, at Three Quarters of an Hour each Day.

THE Squad will now be mounted, (without waiting between the motions,) placed, and turned into circle. This being the first Lesson with Spurs, particular care must be taken in the use of them; they should never be applied, except when actually necessary; of this, the Recruit cannot be a judge: he must therefore, as much as possible avoid using them, unless by order.

It must be understood, that the Rider's legs are, in general, to be kept as steady as possible; and all aids given by them in the most private manner, particularly in Passaging. Circling should now be done at a quicker pace, and after a smart turn each way, go large‡

^{*} The extent of the school.

[†] This is merely for the instructor to observe what progress the squad has made.

[†] It is supposed that nine men have been circling in each end of the school, they will now form one ride, by going large.

to the right, at half a horse's length distance; walking well into the corners of the school.

The squad may now begin bending their horses, by shortening, and using the right rein, more than the left; raising their horses well up with both hands, at the same time urging them forward with the legs.

After taking one full turn, change, by crossing the school at either the second, or forth corner from the door;* and take one turn to the left; again change, (as directed) and go straight, by the word "Forward," then halt, and after a short pause, repeat the bending and changing, at a gentle trot.

They may then passage to right and left; rein back, also turn about to both hands, and finish by dismounting, without waiting between the motions.

The squad will now be found capable of riding their horses to, and from school.

LESSON V.

For One Week; One Hour cach Day.

THE squad, on entering the school, may at once form at open files,† and begin the lesson, by filing off, going large to the right, and forming two circles.

At the caution "To the Right File," they must incline both hands that way, at the same time gently apply the right leg; which will put the horse in an oblique direction, the better, to enable his moving off. At the word "March," each should go off in succession, at the distance of half a horse's length from the one before him.

^{*} Provided the door is in the side of the school, if in one end, the change must be made from either the first, or third corner.

⁺ The breadth of a horse.

After walking, and trotting well, to right and left in circle, they may try the gallop; before they attempt to gallop, it must be fully explained to them, what particulars are to be attended to, viz.

That they keep their horses well up, feeling their mouths from hand to hand; to lean a little toward the circle, and make their horses look the way they are going; to have the outward leg close, ready to assist if required; and at all times prepared, for either falling into a walk, or at once halt.

In order to get the horse off with his proper leg leading, the rider, (with his body well back,) should close his outward leg, at the same instant feel the inward rein; should the horse go off improperly, he must be pulled up, and the same helps repeated stronger. It must be explained to the squad, how they are to know when their horses gallop properly.*

Whilst galloping, the instructors should have a watchful eye on every man, enforcing strict attention to what is laid down.

At first, the squad should be frequently allowed to fall into the walk, and when the seats, &c. are corrected, they may begin slowly to gallop again: of course they will go this pace to both hands, and when they are found to perform it steadily, they may walk, and go large.

The squad will now be well passaged, to right, and left, and frequently turned both ways; also reined

[•] It may be easily known, by the following observation. The horse's inside legs should invariably lead; consequently, the rider's inward shoulder, and thigh, will incline a little forward.

Every dragoon ought to be sensible when his horse goes properly. Galloping false in school, is both unbecoming and dangerous.

backward a few steps, and walked briskly "Forward," at that word being given; then "Halt," regularly dismount, again mount, and be dismissed.

LESSON VI.

For One Week; One Hour cach Day.

Begin this lesson, by filing into circle, as in the last. The squad ought now to be nearly capable of placing themselves, and a great deal will depend on their own exertion;* yet it will be found necessary often to assist them, even in a more forward state.

When they have trotted, and galloped well, to both hands in circle, they should go large, and take two turns in each direction, when it will be seen that every man is thoroughly placed, and by applying their inside legs, cause the horses to go well into each corner.

When the squad is found prepared, at once, (by the word,) fall into a brisk trot: this should be continued some time, frequently halting, and again put in motion, by the word "March". Also slowly reined backward a few paces, and quickly moved forward on that word being given; they may then be allowed to walk a few paces, in order to place themselves; when they are found so, galloping may be tried to the right. Before they begin, it will be proper to explain how much the squad must be on their guard in galloping large, particularly at the corners. In altering the pace, the same aids should be given, as directed for galloping in circle, viz.

^{*} The instructor should instil this into their minds, and hold out, how much it will prove to their advantage, by becoming good horsemen.

[†] Previously naming the pace.

The body kept well back, the inward rein fet more than the other, at the same instant-press the outward leg; and be sensible that the horse has taken the gallop properly; otherwise, quickly halt, and repeat the helps.

The rider should bear in mind how he is to know when his horse is going properly, the instructor, on this should repeat the observations in Lesson V, on that head.

At the gallop, they should be frequently halted, and resume the same pace, at the word "March."*

When the squad is found steady, they may try the change.—For the first time, it will be well to do it singly. In changing, they must gallop with the same foot leading, across the school, and just before entering the first corner, (with the body well back,) for an instant halt, apply the right leg, and feel the left rein stronger; then move on to the left: of course, the opposite aids will be given in changing to the right. When the squad performs it together, the leader must go very slow, till he finds the last horse has completed the change, then by degrees, increase the pace.

The galloping (large), should be repeated, then passage, rein back, and turn, as before directed; when after practising to dismount, and mount, dismiss.

LESSON VIII

For One Week; One Hour and a Quarter each Day.

The squad may be put in motion, by filing large to the right, at a walk, and by the time they have taken one turn in each direction, it may be expected, that every man is correctly placed. After bending to right,

^{*} Previously giving the caution " Gallop."

and left, as before directed, (by the word), fall into a brisk trot, and at that pace, take three turns to the right, then at one end of the school, circle three times, go large, change, and (by the word) take the gallop, going large and circling as at the trot.

Whilst galloping, they should be frequently halted, and again put forward at the same pace.

The whole of this lesson should be repeated, after halting a few minutes, then form at open files, and slowly passage, head and croup to the wall; the latter will be found most difficult, but done by the same aids.

The squad may now be fitted with stirrups, which must be done with the utmost care.**

When stirrups are used, the knees may be allowed to bend a little, consequently, the legs will naturally fall to their proper place.

• There must be no contraction about the ancles, by way of keeping the heels out, if the thighs are sufficiently turned towards the saddle, the heels will be in their proper position; they must however, at all times be kept well down.

The squad should now be taken out of doors, and at a horse's length distance, walk slowly in line, dressing by a flank, and (without halting), turned to the right, and right about, left, and left about; and by inclining,† close, and open files, when at open files, halt, and dismount. After a few minutes pause, again mount, and

^{*} The length of stirrups (when the thighs are completely down and knees straight) to be so, that the iron is just above the inside of the ancle-bone.

The ball of the toe to rest on the stirrup-iron.

[†] In inclining, each man's horse should be half a head behind the one he is moving towards, dressing that way.

go carefully over the leaping bar; strictly observing the directions on that head——then dismiss.

N. B. For the next lesson, the squad should have bits, and need not use switches.

LEAPING.

It is presumed, that the squad has now acquired a tolerable good seat, and are capable of maintaining a proper balance, without which requisite, leaping should never be attempted.

At first, it should be practised without stirrups.

The horse should be led to the leaping bar* by a line, fixed to the eye of the snaffle, a second person should be placed on the other side of the leap, who on having hold of the line, will be ready to render any assistance the learner may require on getting over.

The rider must be careful when the horse rises to his leap, to keep his body sufficiently back, and on a proper balance, allowing the small of the back to yield to the spring of the horse; having the knees, and upper part of the calves of his legs, (with his heels well down), very close to the horse, till he has completed the leap.

He on no account must check his horse in the act of leaping, but rather encourage him by raising him up with the hand, and (having the arms close to the body), go freely with him, at the same time, be perfectly prepared to assist the horse, by having him well in hand when completely over.

The instructor should clearly explain these particulars, before they begin.

[&]quot; Which at first should not exceed two feet in height.

Leaping should at all times be conducted in the most quiet manner, without the use of whips; being particular in bringing the horse straight to his leap, and not suffer him to press on the bar.

When the men are found capable of leaping with stirrups, they must be strictly cautioned to avoid bearing too much on them.

LESSON VIII.

For One Weck; One Hour and a Half each Day.

The squad is now to make use of the bit, and bridoon. The bit rein will be held in the left hand, little finger between, thumb upward, and laid on the rein. The left is called the bridle hand, which should be carried in front of the body, and clear of the saddle.

From the severity of the bit, it must be used in the most delicate manner, and chiefly from the wrist, by the rider cautiously inclining his hand, the way he intends his horse to go. The bridoon rein is, on this occasion, held in the right hand, moving on the rein, to either side, as required.*

The school lesson should be exactly the same as last week, (allowing half an hour for field business;) on finishing which, the men may have stirrups.

In the field, they should form a circle, or square (in file,) at the distance of two-horses length, and at a trot, move in succession from rear to front, passing on the right and left of those before them; beginning on the right of the first, left of the second, and so on, till they are two horses' length in front of the whole, and then

The bridoon rein will be chiefly used in bending the horse.

halt. Each man should move off, when his leader has passed the second horse before him.*

The squad may now be formed at a horse's lengthdistance, and (at a walk,) moved in line, dressing by a flank, turning to right and left about, also close the files to field distance, and file to flanks, front, and rear, at a trot.

Wheel as a division,‡ to right and left in circle, the wheeling flank, at a walk, and trot. They may now advance, and retire, singly, a few yards from both flanks, at a trot, and slow gallop; taking great care in forming, that each man brings his horse perfectly square into the rank.

When formed, let them tell off by files, and dismount, by the left files reining back half a horse's length.

After standing at ease a few minutes, again mount, practise leaping, and then dismiss.

N. B. In future, the squad may use their stirrups, when going to and from the drill.

LESSON 1X.

For Six Days; One Hour and a Half each Day.

DURING this week, the squad will appear with bit, and snaffle, alternate days; beginning with the snaffle.

^{*} In performing this, care should be taken that each man is well placed; and by applying proper aids, turn his horse neatly, without touching those he passes.

[†] Six inches from knee to knee.

 $[\]ddagger$ In wheeling by division, or sub-divisions, dress by the wheeling flank, and halt by the standing one.

The school lesson ought to continue the same as the preceding week, on finishing which, stirrups may always be given, and quit the bridoon* rein.

In the field, after going through the practice of crossing each other from rear to front, as directed in last lesson, they may form at field distance, tell off,+ and prove as a division, Ranks of Threes and Twos; and wheel, to right and left (at a walk and trot,) by Threes, and Twos on the following principle.

The caution being given, "Three's Right Wheel," at the word "March," the wheel is made on the centre man; who will turn on his horse's fore feet, the right hand man reining back, closing his right leg, and the left hand man moving forward; at the word "Halt Dress," eyes attentive to the original front, (the left.)

In wheeling up, they simply wheel back again; by the left reining back, closing his left leg, and the right coming forward; invariably on the centre man.

Wheeling to the left, is the same as directed for wheeling up.† In wheeling about, exactly on the same principle, always to the right about.

- * In the field, when the bit rein is used alone, the bridoon rein will lay behind it, on the horse's neck.
- † It is the front rank men that tell off, turning their head, from the flank they begin (without affecting the body); speaking so loud, that the man who covers may distinctly hear.

At the word "flank of divisions, (or sub-divisions,) prove," the right and left of each extend their right arm the height of the shoulder, with the back of the hand upward; and remain so till they receive the word, "As you were." The same to be observed by Threes and Right Files. In proving, the rear rank remain steady.

‡ In column of threes, the men next the original front should have one foot distance from the man's horse immediately before them.

Wheeling by twos, is a half wheel. At the word "Two's Right wheel," the whole will incline their horses that way, without reining back, and the left files advance a little; the other half wheel is made in succession, as it becomes their turn to go off. At the word, "Left form," the leading two, wheel to the left, and halt; on whom the others form, keeping their eyes steady to that point, till they receive the word, "Eyes Front:" the same to be observed in going to the left.

After the squad has been well worked by Three's and Two's, they should be moved as a division, to right, and left, (at a walk and trot,) in a small square; regularly wheeling at each angle.

When steady at this, they may file* to flanks, front, and rear, at all paces; taking great care in forming, not to croud; also file from the right of Threes, to the front, form, and dismount for a few minutes; again mount, and dismiss.

LESSON X.

For Twelve Days; One Hour and a Half each Day.

This fortnight should be entirely devoted to field exercise; and to be the better enabled to act in double rank, it will be an advantage, to have an equal number of men and horses, in the same state of forwardness.

They should appear in field and marching order, alternate days, only making use of the bit rein.

After forming in two ranks at close order,† tell off, and prove, by divisions, sub-divisions, Threes, and Twos; and on being correctly dressed, let the rear rank

^{.*} In file, the distance should never exceed a horse's length.

t The rear rank, half a horse's length from the front.

take order,* by reining back, and practise drawing, and returning swords,† then close the rank, slope swords, and begin marching in line, dressing by a flank.

When they are found to do this steadily at a walk, and trot, wheel to right and left in divisions, and subdivisions, at the same pace.

Wheel to both flanks, by Three's, and Two's, at a walk, trot, and gallop; also perform all filings at a quick pace.

When in column of Threes, double the rear rank behind the front, and file from the right of Threes, to the front.

The whole of this to be repeated as often as the given time will admit, increasing the pace, as the division is found to improve.

In the last week, they should be well worked in line at a walk, trot, and rapid gallop; when nearly time to dismiss, let them pass in parade, with open ranks, and swords carried; also, rank off; in single file, at half a horse's length distance, covering exactly; then form, return swords, and dismount. After a few minutes pause, again mount, and dismiss.

The next fortnight should be employed in practising the carbine and pistol exercise, (as recommended in this work,) when it may be fully expected, the squad is capable of acting in squadron.

^{*} The rear rank, back one third of the division's front.

[†] Agreeable to the sword regulations, a copy of which is annexed to this lesson.

[‡] In ranking off, each man should make the most of himself, and horse, by being perfectly placed, and looking full at the person he is passing.

N. B. Should any man be found incapable of being brought forward with the squad to which he is first appointed, of course, he must be allowed a little more time, and brought forward with another.

DRAWING OF SWORDS.

"The sword will be drawn and brought to the position in which it is to be "carried," in three motions.

Words of Command.

Draw Swords.—Motion 1st. "Upon the word "Swords" being uttered, direct the eyes to the sword-hilt, bringing the right hand with a sharp action across the body and over the bridle arm to the sword-knot, placing it upon the wrist, and giving the hand a couple of turns inwards, in order to make it fast, at the same time seize the hilt, and wait in this position for the second motion, which will be made by the fleugel-man on the right. The back of the hand is to be to the rem."

2nd. "Draw the sword from the scabbard with a full extended arm, at the same time sink the hand full the hilt of the sword is immediately under the chin, with the blade perpendicular, and the back of the hand outwards."

3rd. "Bring the hilt down to be in a line with the bridle hand, the elbow near the body, the blade perpendicular, and the wrist in a small degree counded, which turns the edge inwards in the direction of the horse's left ear."

SLOPING OF SWORDS.

Slope Swords—" Keep the sword-arm in the exact position, pointed out for the carrying of swords; but distend the second, third, and fourth fingers from the

gripe of the sword, in order that the back of the blade may meet the hollow of the right shoulder, where it is to be supported with the edge directed to the front."

"When in this position, the sword will be kept steady, and is to be without motion, at whatever pace the horse may be moving."

RETURNING OF SWORDS.

"The sword is always to be returned from the carried position, and not from the sloped. This is likewise executed in three motions, dressing by the right."

Words of Command.

Return Swords.—Motion 1st. "Carry the sword-hilt to the hollow of the left shoulder, having the back of the hand outward, and the blade perpendicular, without pausing. Drop the blade (but not the hand) to the rear close by the left shoulder, directing the eyes to the scabbard,* in which the blade is immediately to be placed, and returned until the hand and elbow become in a line with each other, square across the body, and keeping the back of the hand directed to the rear."

2nd. "Thrust the sword home into the scabbard, and loosen instantly the sword-knot from the wrist, keeping the hand upon the hilt."

3rd. "On the motion from the fleugel-man, carry the right hand from the hAt with a smart action to the off side."

MODE of using CARBINE and PISTOL.

CARBINE.

It is presumed, that previous to a dragoon using arms on horseback, he has been taught to load on foot, it is

^{*} By resting the blade upon the bridle arm, the point will easily meet the scabbard.

therefore deemed unnecessary to enter minutely into the detail of loading.

The squad should be formed at field distance; and at the word, "spring and unstrap," secure the right hand glove in the holster or horse-shoe case, quickly unbuckle the carbine-strap, and with the small of the butt in the left hand, fix the swivel, letting it drop behind the thigh (muzzle downward); then resume an upright position, and be steady.

Advance Arms.—Motion 1st. With the right hand, seize the carbine before the lock.

2nd. Raise the muzzle in an oblique direction, in line with the horse's left ear, the hand resting on the right thigh.

Prime and Land.—Motion 1st. From the advance, quickly shift the carbine into the bridle hand to the priming position, and regularly open pan, prime and shut as directed.

2nd. Turn the muzzle toward the right shoulder, by pressing the butt from the body, (under the rems) and bring it to the near side of the horse's shoulder, barrel to the front.

3rd. Allow the carbine to sink as low as the belt will admit, at the same time shift the right hand to the muzzle, in order to load.

When loaded, let the right hand resume its former position before the lock, and bring it to the advance, (by that word).

Make Ready.—Quickly remove the carbine into the bridle hand to the priming position, and cock, instantly coming to the recover, holding the carbine in the right hand by the small of the butt, which must rest on the right holster.

Words of Command

Front present.—Rise a little in the stirrups, and take proper aim, being particularly careful, that the carbine is four inches clear of the horse's head.

Fire.—Instantly after firing, recover,* and load as directed.

Left present.—Quickly turn the right thigh inward raise the left elbow, rest on, and present immediately, over the bent of that arm.

Right present.—Turn on both thighs to enable the right shoulder being thrown back, and present with the right hand, without the assistance of the left, taking the usual aim.

Return Carbine.—The muzzle to be returned to the bucket, swivel undone, strap up, and put on the glove, then be steady.

PISTOL.

Loading of the pistol is similar to that of the carbine, and presented to front, right, left, and rear; at all times taking good aim, by looking eagerly along the barrel, and as directed with the carbine, invariably recovert for an instant after firing.

^{*}This should be invariably done, whether the piece is to be immediately loaded or not, as it will relieve the horse's anxiety, and prevent accidents.

⁺ At the recover the pistol should be in front of the right breast, and muzzle rather sloping forward.

PART II.

FORMATION OF THE HORSE.

LESSON I.

For Six Days; Half an Hour each day.

IT may be naturally supposed, that a horse intended for the Army is four years old, it is therefore probable he may have been accustomed to a bridle, and perhaps a saddle.

If the horse is in perfect health, and tolerable condition, he may begin to work gently.

Three horses at a time may be led to the riding school, (in snaffles,) and a cavesson put properly on each, when in the presence of the riding master, or his assistant, they should be carefully saddled without the crupper.

Particular care should be paid, that the girths are not buckled too tight, many horses have been made troublesome, from that circumstance.* Should the horse dislike the saddle, and seem inclined to plunge, hold him fast by the bridle and cavesson, until he becomes reconciled. Previous to his being led off, a surcingle (belonging to the riding department,) should he put on, having a fixed hook, similar to that upon a harness saddle, with a pully in it, for the bridle rein to run on.

^{*}If two fingers can be introduced, without much difficulty, between the Horse's body and the girths, the girths may be considered as properly tight.

When the surcingle is on, the hook must be placed on the upper part of the saddle, where the rein will be put, at such length, that the horse can bear lightly on the bit.

When thus equipped, let the horse be led off quietly, and begin circling to the left; at first, he should be led once or twice round the circle, shewing him where he is to go.

In going off, should the horse again shew a disposition to plunge, instantly halt and correct him, by holding his head well up, and speaking sharply to him, but on no account beat him; by this correction he will perfectly understand his having done wrong, and probably may not attempt it again.

The line of the cavesson should be held with great attention, feeling and easing the horse, as is found necessary. A second person should follow, having a whip in his hand, who by frequently moving it on the ground, will be the means of helping the horse forward; if he is found to be idle, or heavy, touch him lightly with the whip, but at all times avoid severity.

He should be trotted for the space of ten minutes, then brought into the centre of the circle, halted and caressed; after a few minutes pause, begin circling in the same manner to the right, leading off as at first, then halt, and again encouraging him.

The cavesson and surcingle may now be taken off, and the horse put up along the wall in hand, the length of the school and back again.

The person who leads him, should be placed immediately before his head, with a hand to each rein, close to the eyes of the snaffle, holding him well up, and feeling his mouth from hand to hand; at the same time step-

ping slowly backward. A second person should follow and with his whip urge the horse gently on. At first only a few steps of this at a time should be taken, frequently halting, and again moving forward.

When he has finished the given distance, halt, and caress him; afterward allow him to be led to the stable.

LESSON II.

For Six Days; Half an Hour each Day.

When the cavesson and surcingle are properly put on, lead off and begin circling as in last lesson, and after working to right and left the time specified, put the horse up along the wall as directed. A full turn of this in both directions, may now be given. Then try the passage to the right.

This should be done by the horse being placed perfectly straight, with his head facing and close to the wall, the person who leads him must be on his near side and close to his shoulder, having the left eye of the snaffle in his left hand, and with his right arm over the horse's neck, lead him by the right rein that way, at the same time with his left hand press the horse from him which will cause him to cross his fore-legs; the person who follows his hind quarters, will, by moving his whip on the ground, assist him in crossing his hind ones. Of course the opposite means will be used in going to the left. At first only a few steps of the passage should be taken, frequently halting, and trying it again. He may also be reined back a little, and again put forward, then halted, and encouraged, before he is dismissed.

N. B. Previous to dismissing the horse, (on the first day of this lesson,) he may be carefully cruppered, which must be done in the riding house, by the assis-

tance of the rough riders, and afterwards quietly led off a few steps.

LESSON III.

For Six Days: Three Quarters of an Hour each Day.

It may now be expected, that the horse will begin to be tractable, and go in circle with freedom, lifting his feet actively, without pulling against the cavesson line.

It is probable, he will be more supple to one hand, than the other, by this, circling must be guided, and of course worked most to the hand at which he is found heaviest.

After sufficient circling, and working in hand as directed in last lesson, the three horses may be carefully mounted, by experienced riders.

Should any of them be unsteady, or troublesome, a person should invariably lead them till they become quiet, when they are so, they may be halted, encouraged, and the cavesson taken off. They should again be led off a few steps, and quietly made to go large, taking a full turn to the right, then at one end of the school, circle twice;—go large,—change, and the same to the left. From the walk, they should be often halted, and put in motion again: also made to take a few steps backward, and (without halting) put briskly forward; after which halt and caress them, and be very particular in quietly dismounting, then dismiss.

LESSON IV.

PREVIOUS to mounting, circling should be made at a quick pace, even to a gallop. If the horse does not take the gallop with ease, and nearly of his own accord,

on no account press him, but continue circling at a trot; should he take the gallop, be sure he goes with his inward legs leading, if otherwise, immediately stop him, (by shaking the cavesson line,) and repeat the trial, when it is probable he will go right. At first, only a few turns of the gallop must be given at a time. The horse may now be halted, and the cavesson taken off; then after going through the lesson in hand as last week, mount, and begin, by going large to the right at a steady walk. When they walk freely, and carry themselves tolerably well, they may be put into a gentle trot, taking two full turns in both directions, then walk. In altering the pace, they must not be allowed to make any stop, but at once, fall into a full active walk.

The trot may be repeated, afterward gently try the half passage to right, and left. Should the horse refuse, on no account force him, but patiently persevere in obtaining it. They may also rein back a few steps. and turn about to both hands; then dismount, and quietly put them over the leaping bar,* at a moderate height; again mount, and dismiss.

N. B. In future, the horses may be rode to and from the school.

LESSON V.

For Six Days; Three Quarters of an Flour each Day.

CIRCLING with the cavesson may now be discontinued, and a squad, consisting of twelve horses (equally forward,) formed.

[•] The horse should be brought straight to his leap, and encouraged ' to take it of his own accord; he should not be allowed to hurry, or press on the bar.

The horses should be rode to the school by steady and good horsemen, and after being regularly formed at a horse's length distance, they may begin the lesson by going large to the right at a walk. Particular attention must be paid to the placing of the horses, observing that their heads are carried well,* their paces full and regular, and that they move actively.

As they go on, the riders should endeavour to improve their horses' mouths, by lightly feeling, and playing with the bit; and at the same time press sufficiently with the legs, to urge them up to their bridles, but strictly avoid touching them with the spur.

After the squad has taken a few turns in both directions, they may bend a little to right and left, then commence a trot, and after taking a couple of turns each way, walk, and (in circle,) try the gallop to the right. It must be done slowly, frequently filling into a walk, then begin again. It may also be tried to the left, then walk, and go large. At the walk, let them often halt, and move on again; also rein back a little, and without halting, again move forward: then passage to the right and left, and turn to right and left about. They may now be formed at open files, regularly dismount, and lead their horses over their bar; again mount, and dismiss.

LESSON VI.

For Six Days; One Hour each Day.

Ir may be now presumed, that the squad will be capable of performing a brisk lesson; they may at once

^{*} It often happens that young horses raise their heads higher than their proper attitude; in that case, let a pair of running reins be used, and discontinued as soon as possible.

file off, and go large to the right at walk; and after taking one turn each way, bend to the right and left, then fall into a brisk trot, the whole altering the pace at the word.

They should go large, and circle twice to the right, change, and the same to the left; again change, and take the gallop, going large and circling, as at the trot. At the gallop, the change should be made very slow, and the riders must be particular in applying the proper aids, in due time; of course care will be taken, that they gallop properly.

This part of the lesson should be repeated, after being halted a few minutes, during which time, the horses should be caressed.

The squad may now be quietly passaged, head and croup to the wall, then formed at open files, and after being dismounted for a few minutes, again mounted, and taken out of doors*; when at a horse's length distance, they should be steadily walked in line, turned to the right, and right about, left, and left about; also on the march, by inclining, close and open their files. After being formed at exercising distance, advance by alternate files, a few yards, halt and let the rear files pass through the intervals. They may then form and dismount, by the left files reining back half a horse's length; after a short pause, again mount, and the horses may now be rode over the leap, then dismissed.

N. B. For the next lesson, the squad should have bits, with cloaks folded behind.

[•] It will now be proper before leaving the school, to have a dram beat for a few minutes each day; also shew the horses some flags of different colours, and fire off a few cartridges.

LESSON VII.

For Twelve Days; One Hour each Day.

THE squad is now to make use of the bit and bridoon, which ought to be well fitted, and used with the utmost care. The bridoon rein to be now in the right hand, by which, the bending should be chiefly done. In the first day of this lesson, it will be proper to leave the bit rein entirely alone, allowing it to remain on the horse's neck,* during which time the bridoon rein should be used in both hands.

The school lesson of this fortnight, to be exactly the same as last week, at an increased pace, after which they should be taken to the field, and a open files, and field distance, marched in line, at a walk, and trot, open and close their files, both by passaging, and in file. File to flanks, front, and rear, at a brisk trot; and advance by alternate files, form, and work to both flanks, by threes and twos; also wheel as a division in a complete circle to right and left, the wheeling flank increasing the pace from a walk, to a smart gallop.

The squad may now move in a small square, to right and left, regularly wheeling as a division, at each angle. They may then dismount for a few minutes, again mount, and after practising leaping, be dismissed.

LESSON VIII.

For Twelve Days; One Hour and a Quarter each Day.

DURING this fortnight, the squad should use bits and snaffles, alternate days; beginning with the snaffle. The

This is done to give the horse an opportunity of feeling the bit, before it is made use of by the rider.

days they appear with bits, they should also have swords*, and cloaks folded behind.

The school lesson should continue the same as the last fortnight, only performing it once each day. In the field, they should form at field distance, and tell off, as a division, sub-divisions, threes and twos; and after drawing swords, begin marching in line, at a walk; on being found steady at that pace, they may trot and gallop. Wheel in division, and sub-divisions, to right and left, at a walk and trot; also wheel by threes and twos to each flank: and go through all the filings, at a trot, and slow gallop. They should advance a few yards from both flanks in single file, form, and retire by threes; also advance by alternate files as in last lesson; then form, and dismount, again mount, and after leaping, dismiss.

LESSON IX.

For One Hour and a Half coch Day.

This fortnight should be wholly employed in field exercise, and it would prove an advantage to have an equal number added to the squad.

They should constantly appear either in field, or marching order, only making use of the bit rein.

After being formed in two ranks, at close order, tell off as a division, sub-divisions, threes and twos; let the rear rank take order, by slowly reining back, and segularly practise drawing and returning swords, till the horses are found steady, when the rank may be closed, and begin marching in line, at a walk, dressing

[•] The first day with swords, it would be proper to allow the men to draw and return them quietly without any word of command.

by a flank. Wheel to right and left, in divisions, and sub-divisions, at a walk and trot. Wheel to both flanks by three's, and two's, at a trot and gallop, also perform all the filings at the same pace.

The whole of this should be repeated, according to the time allowed, and the pace guided by the steadiness and improvement of the horses.

A few cartridges may be used each day, (commencing at extended files,) being particularly careful, that the carbine, or pistol, is kept a good distance from the horse's head. At the expiration of this fortnight, it may be fully expected that this squad of horses are perfectly fit to act in squadron,

N. B. Should any horse be (found from being too young, or from weakness) incapable of performing his lesson with the squad to which he is first appointed, he should be allowed a little more time, and brought forward with another.

ARTICLE V.

Answers of Sir A. D., K. C. B. of the Royal Artillery, to some questions from Lieutenant C. D. Bengal Artillery.—Woolwich, 17th of January, 1823.

QUESTION.

1st. At the conclusion of the Peninsular war, what was your opinion of the block trailed carriages, and the ammunition waggons in use with the British field Artillery employed therein? Did you think them fully adapted to the purposes of travelling over the various kinds of ground you must have met with during that war; and to those of manœuvring and action, were they found to stand an action of considerable duration without breaking down or splitting in any part, and was the perforation for the elevating screw ever found to weaken the block trail or beam?

Those who are against the British carriages, and in favour of the affut Gribeauval, urge, that perforating for the screw is objectionable, as weakening the beam.

ANSWER.

1st. The equipment of field Artillery during the whole Peninsular war, was with block trailed carriages, and four wheeled ammunition limber waggons, according to the convenient system adopted in the British service, by which the waggon limbers being packed and fitted exactly the same as those for the guns, the former can be substituted for the latter in time of action, without the

waggon's being brought much in fire, and most disastrous consequences from explosions are thereby avoided.

The block trailed carriages were found much superior to the cheek trailed or bracket carriages, in strength and durability, in facility of limbering and unlimbering, and in pointing whilst in action; they also admitted of more close turning in manœuvres and on the march.

The limber waggons were admirably adapted for the stowage of ammunition, and at the same time possessed, on an emergency, the convenient means of rapidly bringing up the men to action without the risk of their being breathless from running or left behind; this on many occasions was highly beneficial to overtake a retreating enemy, or to fall back quickly when protecting a retrogade movement, or to move with speed from one flank to the other of a corps as the exigency of operations might require.

To this is to be added the great simplicity they afford to the system of field Artillery, the limbers being the same as those for the guns, the wheels the same for light 6-pounders, for all ammunition limber waggons, and for the forges and store carriages, and they will answer also for 9-pounders on an occasion: indeed I believe they are quite strong enough for this nature. A 9-pounder with 6-pounder wheels, having for experiment been employed for a 12-month in one of the field batteries under my orders in France, and during that time the gun three times a week was marched 12 or 14 miles over the paved roads of that country.

The Portuguese were so sensible of the convenience and simplicity of our system, that at a very early period of the war they adopted the construction of our carriages and amber waggons; but having contracted their span easily overset, by which the perches of their limber waggons were frequently broken: this was an inconvenience that scarcely ever happened with the English carriages, their span being 5 feet 3 inches, whilst that of the Portuguese was only 4 feet 2 inches. It is true that in some of the narrow Portuguese roads the British Artillery was obliged to make a detour, whilst the Portuguese carriages could pass through; but this convenience was nothing in comparison to the damage arising from frequent overturns which often occasioned me much delay during my movements with the Portuguese.

On the whole I am satisfied the British equipment, with block trails and a universal limber, is the most perfect that has been devised by any nation, and the French are so convinced of this, that they are understood to be on the point of abandoning Gribeauval's system and of adopting that of England.

I have to add, that during the whole period of the Peninsular war, as well as in the Waterloo campaign, the British carriages had to pass over every species of ground, from the most mountainous to the most swampy, and the Artillery made no difficulty in accompanying the Infantry in all its movements; the carriages fully demonstrated the solidity and excellence of their construction, by standing both the shocks of execrable roads and of frequent heavy firing without scarcely ever wanting repairs: the wheels of course would only wear a certain time, but the bodies of the carriages were most durable; and with regard to the perforation for the elevating screw I am certain, during the whole Peninsular war, that no block trail was ever called in question on that account.

Four wheeled gun ammunition limber waggons have been found so perfectly applicable to all natures of movements, that it is now determined to employ the same waggons in the conveyance of small arm ammunition; they are to be drawn by 4 horses, and in a good country and good roads, they may convey 20,000 rounds of musket cartridges, and in a difficult country 16,000 rounds.

QUESTION.

- 2nd. Did you from what you had seen of the French field Artillery carriages and caissons, deem them or any other part of the French construction inferior or superior to the British? if superior, for what reasons; and if inferior, in what does the inferiority consist?
- N. B. As the latest pattern for our field carriages on this establishment is, with a few modifications, agreeable to the French system, as laid down in Scheel's Memoires, I shall be much obliged by your being very explicit and particular in your answer to this query.

ANSWER.

- 2nd. There is little to answer on this, after the foregoing explanation, particularly as the French themselves have spoke in the strongest terms of approbation of the British carriages, and I understand have an intention of modifying their system according to them.
- This I know—that the French carriages are heavy in limbering, and of inconvenient movement; they are difficult to limber and unlimber, so much so as in action to occasion great use of the prolonge, which I am sure was the cause of their losing many guns: whereas ours, when pressed, could limber up and be off in an instant.

The French when opposed to us in Spain were often, according to their own account, retarded in their operations to repair damages the Artillery had sustained, owing to the difficulty of country; this I can boldly say never was the cause of any delay in the British movements.

Without entering into minutia, I beg to add, that it is my firm opinion that the systeme Gribeauval is far inferior to the British field Artillery, both as to facility of movement and convenience in action, as well as compactness when in column of march.

QUESTION.

3rd. From what you saw of the field gun carriages, and waggons in use with the Austrian, Russian, and Prussian contingents of the Army of occupation, do you think any of them superior to the British?

ANSWER.

3rd. I neither with the Army of occupation, or on any other occasion, have come in contact with the Austrian Artillery.

The Russian gun carriages are something of the French construction; but their ammunition is conveyed in an immense number of small low wheeled carts, drawn by 3 horses abreast, by which the equipment is complicated and unmanageable. I saw nothing to envy in the Russian Artillery.

The Prussian Artillery was very much a make up of what they could collect from other nations, their carriages were actually French as well as their caissons; they had also English and Flander's pattern waggons in their park, and their harness was chiefly English, or made on the English pattern.

The Prussian mode of bringing their Artillery rapidly into action was, having saddles on the off horses, by which means, when necessary, three gunners can be mounted on horseback and two on the limber, enabling the gun to advance with 5 men: a third man even can occasionally be conveyed on the limber.

I have to add that the French as well as all the other foreign Artillery, have poles; but the French writers begin to expatiate on the advantage of Shafts.

Finally, to answer this question, I do not think any of the field Artillery of other European powers which I have seen, equal to that of England.

OUESTION.

4th. What is your opinion of light 12-pounders, and light 6-pounders as field pieces, deduced from your experience in the Peninsular war?

N. B. Our field guns, as I have more than once mentioned to you, are light 12-pounders and 6-pounders; of the former we have two kinds, the one weighing 12 cwt. the other between 8 and 9 cwt. and both the same length, i. e. 5 feet.

ANSWER.

4th. Light guns in my opinion are merely to suit certain difficulties of country, when they are not likely to be opposed by ordnance of a better class; for otherwise the precision and effect of light guns is so unsatisfactory, that I think it is infinitely better to bring fewer pieces into the field, provided they are guns of decided effect. Indeed, in the point of general consideration with regard to Artillery movements, the difference of 2 or 300 pounds in the weight of a gun is not of the

material importance that many officers are apt to consider it; the employment of a couple of horses more or less will solve the difficulty. Provided the carriage is compact, and of well proportioned strength, it is not the gun that need ever be a question, it is the conveyance of ammunition: for I am satisfied, unless in a mountainous or most boggy district, that is to say, whenever a country is practicable, Artillery of proper dimensions may be moved beyond the power of any Infantry to accompany it, and it never would be an impediment to operation. This was fully exemplified in Spain, and I am sure that a good gun well manned and well horsed, will pass over every obstacle that a light gun can do.

The light 12-pounder of 12 cwt. the lightest we have in the English service, is abolished, and I hope to see a 6-pounder introduced of a better description than our present light one of 6 cwt. 9-pounders of 13 cwt. were the favorite guns in Spain in the latter campaign's, and the chief part of our field Artillery at Waterloo was of that nature.

QUESTION.

5th. What do you think of light 5½ inch howitzers as field pieces? did you not find them very uncertain and inaccurate, and the quantity of powder which their chambers are capable of holding too small to give a sufficient velocity to Shrapnell's shells? What is the service charge with you for these pieces?

ANSWER.

5th. The light 5½ inch howitzer is good for nothing; indeed it is abolished in our service. The charge was 1 lb. which was not sufficient for the velocity required for spherical case.

A 12-pounder howitzer of 6 cwt. and 3 feet 9 inches long, with gomer chamber, was some time ago introduced into the service in place of the light 5½ inch howitzer; the charge of this new howitzer is 1 lb. to 1½ lb. A number of these are in progress of being cast in the foundery.

QUESTION.

What is your opinion of Heary's 51 inch howitzers as field pieces? did not you find them too heavy for quick movements?

ANSWER.

6th. It is a good howitzer and it was not found too heavy for quick movements, no others were used in Spain for both horse and foot Artillery. Being considered however too short, a 24-pounder howitzer has lately been introduced into the service in place of it. This new howitzer is 12 cwt. and 4 fect 8 inches long, with gomer chamber, and charge from 2 to 2½ lbs. With 2 lbs. and 5° of elevation, it carried as far as the heavy 5½ howitzer with 2 lbs. and 7°. A number are in progress of being cast, and I think it will become the howitzer of general use for field batteries.

QUESTION.

7th. What is your opinion of the 9-pounders now in use with the British Artillery as field pieces? did you not find them too heavy, they weighing 13 cwt. and too long for quick spunging, being 6 feet long?

ANSWER.

7th. The 9-pounder is a most efficient gun, and I have no doubt will always be the piece most used by us

on continental service. In the latter campaigns in Spain, with the exception of the horse Artillery and one battery of long 6-pounders, all the rest were 9-pounders; and at Waterloo, both horse and foot Artillery, almost all had 9-pounders.

If any thing the 9-pounder is not long enough; at present it is 17 calibers, and I think there is metal enough to increase it to 19 calibers without adding to its weight, which would add to its precision of fire.

The best field Artillery for an Army would I think be, one half 9-pounders, and one half 6-pounders of about 9 cwt.; or one half 9-pounders, two sixths 6-pounders, and a sixth 3-pounders heavy, to be employed with light Cavalry, and at advanced posts.

OUESTION.

8th. What is your opinion of the heavy 6-pounder? the field train employed in the Peninsular was, I believe, composed in part of pieces of this description.

ANSWER.

8th. It is an excellent shooting gun, but it is longer than what is necessary. There was one battery of long 6-pounders in the Peninsula during the whole war, and it did good service, but it was not a favorite command; it was not considered manageable, or to manœuvre well, though I always thought there was something of prejudice in this; at the same time it was true that there was 3 or 4 cwt. of metal more than was necessary. This battery required as many horses as one of 9-pounders. I do not think it will be called into the field again.

QUESTION.

9th. What is your opinion of light 18-pounders brass as field pieces? A brigade, I perceive, was at Waterloo.

ANSWER.

9th There is no such piece in the British service as brass 18-pounders. The guns you allude to were iron 8 feet 18-pounders, of 37 cwt. There were 3 batteries of these guns, of 4 each, in the Waterloo campaign, though not in the battle; and a battery of 6 of the same. 18-pounders attended the Army in all its movements in the latter campaigns in the Peninsula; these pieces were intended against posts &c. but had no connection with the battering trains for seiges. The 18-pounder field batteries were drawn by horses, and appointed the same as other field Artillery.

QUESTION.

10th. What is your opinion of the calibers in use with the French, Austrian, Russian and Prussian field Artillery; are not the Austrian and Prussian field how-itzers superior to our light 5½ inch, from being much longer and having more capacious chambers, and therefore capable, of giving a more true direction to the shells?

ANSWER.

10th. This comprises such a mass of comparison that I will not enter into it at present, but certainly all the howitzers of the Continental powers were preferable to our light 5½ inch howitzer; but that being irrevocably laid aside, the comparison is of no further use. But I think our new 24-pounder howitzer will be found superior to any of them, not even excepting the Russian Licorne.

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QUESTION.

11th. What is your opinion of the Mountain 3-pounder carriages, and their ammunition carriages, which were used when our Army was in the mountainous parts of the Peninsula?

ANSWER.

11th. Those carried on backs of horses distress the animal extremely if employed in that way for any length of time. The French mode for mountain Artillery is better; the span is very narrow, and the gun is always drawn in single draught; the shafts are of this shape and they can be detached in an instant from the trail, when the gun prepares for action.

OUESTION.

19th. What is your opinion of the iron carriage for carronades?

ANSWER.

12th. I approve highly of iron carriages of all descriptions, particularly for warm climates; I am satisfied they are equal to every effort they may be exposed to.

QUESTION.

13th. What is your opinion of Sic Howard Douglas's Gun locks, with double flints?

ANSWER.

13th. They have not been adopted in the service, the spring of the lock not having been found sufficiently active with the additional weight. Common locks however are in universal use, and they are recommended even for field pieces when not pressed by an enemy.

QUESTION.

14th. What is your opinion of Sir Howard Douglas's proposed decrease of the windage of field pieces to \(\frac{1}{4}\), of an inch, and of battering guns to \(\frac{1}{4}\) of an inch?

ANSWER.

14th. I think the decrease of windage, for both field pieces and heavy ordnance, perfectly admissible and advantageous; it has been determined to be carried into effect for field Artillery, but the alteration for heavy Artillery was laid aside in consequence of the Navy being afraid of the consequences at sea. This was the opinion of the principal sea officers, Lord Keith, Lord Exmouth, &c, in joint Committee with Artillery officers.

A. D.

ARTICLE VI.

Second communication on the fortress of Allygurh.

To the Editor of the Military Repository.

MY DEAR SIR,

After the dispatch of my last letter to you, finding that there was little chance of my being removed from Allygurh, I set about measuring the profile of the works throughout, and on discovering the height of the crest of the glacis from the plane of scite to be 8 feet. I found that my faussebraye in Sect. 4. (of the profiles enclosed in my last) would be much too low. I therefore proposed depressing the crest of the glacis about 31 feet which would require the whole rampart to be depressed in proportion. By Section 5, accompanying this letter, you will observe the rampart is lower than my original one, by 4 feet, which gives a command of 161 feet over the crest of the glacis: the command generally recommended by Vanban. The advantage of this will, I think, strike you; the fire plunges to the foot of the scarp, and a parapet on the revetement, loopholed, similar to that of a native fortification, would strike the ditch within 14 feet of that point, and guns mounted on the works would give a plunging fire very nearly on the foot of the glacis.

A few days before I left Allygurh the officer in charge of the papers belonging to the Engineer office, kindly allowed me to examine them, and see whether I could not find some profiles of the works in question. I was

successful, and discovered the report of a select committee of Engineer officers who assembled in 1822, after the commencement of the giving way of the revetement. Attached to this report were fourteen sections of the masonry and rampart, four of which I send to you. pears that no regularity whatever exists in the dimensions of the ramparts throughout this fortress. Sect. 1 had at the foot of the revetement, large pieces of konkur laid in mud!! and the thickness decreased in the proportion of 1 to 2. Sect. 2, is similarly shaped, but no konkur. Sects. 3 and 4 have a mean thickness of 11 feet. I selected these 4 sections, as shewing the strongest and weakest points. I also discovered amongst the papers, a proposed alteration by the committee, who recommended a new revetement to be built altogether, some feet in advance of the old one, and lowering the glacis and rampart much in the same way as I propose; indeed the proposal is so obviously requisite, that I can hardly be accused of pirating, nor did I ever see these papers till the day before I left Allygurh. .

I still abide by my first proposition, viz, merely to throw back the rampart, and not build a new revetement, although the old one is bulged considerably in places. I conceive that the small mass of earth which it would have to support, would be insufficient to cause any serious alteration. This is, in an economical point of view; otherwise the alteration proposed by the committee would be infinitely superior: their proposal gives a parapet with a banquette on the faussebraye, lowering the glacis even more than I have in my section. The berm also varies throughout the works at presects from 1½ to 6 feet.

150 Second communication on the Fortress of Allygurh.

The dimensions in the accompanying profiles differ in some immaterial points from that sent in my last letter. You will be able to compare them. I conclude of course that mine are wrong and the committee's are right.*

[•] The differences in the measurements are not of sufficient consequence to make separate plates necessary. Ed.

ARTICLE VII.

Government Orders .- New Articles of War.

Fort William, April 29, 1824.

No. 122 of 1824.—The Right Honourable the Governor General in Council is pleased to publish the following Extract of a letter from the Honourable the Court of Directors, dated 29th October 1823, and received with "An Act to Consolidate and Amend the Laws for Punishing Mutiny and Desertion of Officers and Soldiers in the Service of the East India Company, and to authorise Soldiers and Sailors in the East Indies to send and receive letters at a reduced rate of Postage, (18th July 1823) Anno Quarto George IV Regis," together with "Rules and Articles for the better Government of the Officers and Soldiers in the Service of the United Company of Merchants of England trading to the East-Indies, London, 1823."

Extract—"In conformity with your recommendation, the propriety of a Revision of the Laws by which our European Eorces had been intherto governed was brought under the consideration of Parliament during its last Session.—The Act of the 4th Geo. 4. Cap. 18 was passed in consequence; and His Majesty having been pleased to make and sign Articles of War founded on its provisions, we transmit to you 150 Copies of the Act and Articles bound together, which you will cause to be properly distributed."

Agreeably with the concluding Section of the Act which provides for the period at which its operation shall commence, the Governor General in Council is pleased to notify, that, from and after the 1st day of June next, the new Act and Articles of War are to be considered in full force and operation, and to be duly adverted to by all Public authorities accordingly under this Presidency.

The entire number of Copies mentioned in the Extract of the Honourable Court's letter not having been received as yet, a due distribution of them will be made on their arrival; in the mean time the following Extract is published for general information:

Section XXI. Article 1st. No Officer Non-Commissioned Officer or Soldier shall be adjudged to suffer any punishment extending to Life or Limb by virtue of these our Rules and Articles, within the Company's possessions, except for such Crimes as are herein expressly declared to be so punishable within the same.

- Art. II. But all Crimes not Capital, and all Disorders and Neglects which Officers and Soldiers may be guilty of, to the prejudice of good order and Military discipline, though not specified in the said Rules and Articles, are to be taken Cognizance of by a General or Regimental Court martial, according to the nature and degree of the offence, and to be punished at their discretion.
- Art. III. All Serjeants and Non-Commissioned Officers, and Persons employed beyond their Regimental Duty, receiving any regular Pay in respect of such Service, are to be subject to Orders according to the Rules and Discipline of War.

Art. IV. Notwithstanding its being directed in the Ninth Section of those our Rules and Articles, that every Commanding Officer shall deliver up to the Civil Magistrate all Persons under his Command who shall be accused of any Crimes which are punishable by the known laws of the land, yet the General Governor or other Officer having power to appoint Courts martial, is to appoint Courts martial as occasion may require, to be holden in any Foreign Country, or at any Place other than Prince of Wales' Island in the Territories under the Government of the said United Company, situated above One Hundred and Twenty Miles from the Presidencies of Fort William, Fort Saint George, and Bombay respectively, for the Trial of any Person under his Command accused of having committed Winal Murder. Theft, Robbery, Rape, or any other Crime, which is · Capital by the laws of England, or having used Violence or Committed any Offence in any Foreign Country, or at any place other than Prince of Wales' Island, in the Territories under the Government, of the said United Company situated above One hundred and Twenty Miles from the said Presidencies respectively, and the Persons accused if found Guilty shall suffer Death, or be liable to Transportation for Life, or for a Term of Years, or to such other Punishments, according to the nature and degree of their respective Offences, as by the Sentence of any such General Court martial shall be awarded; such Sentence nevertheless to be in conformity to the Common and Statue Laws of England. -

Art. V. All these our Rules and Articles are to be read and published once in every two Months, at the head of every Regiment, Troop, or Company, mustered or to be mustered in the Service, and are to be duly ob-

served, and exactly obeyed by all Officers and Soldiers who are or shall be in the Service.

Art. VI. And it is our further Will and pleasure. That whenever any of our Land Forces shall be sent into the East-Indies, they shall, whilst employed there, duly observe and obey the foregoing Rules and Articles for the better Government of the Officers and Soldiers in the Service of the United Company of Merchants of England trading to the East-Indies, and be subject to the Pains and Penalties therein specified for Crimes or Offences against the same.

ARTICLE VIII.

New formation of the Indian Army.

G. O. G. G. Fort William, May 6, 1824.

No. 129 of 1824.—1st, In obedience to Instructions received from the Honourable the Court of Directors, under date the 25th November 1823, the Armies of the three Presidencies will be placed on the following Establishment, as to Officers, from the 1st instant. All Promotions will be dated accordingly, and made in the usual manner, by Line Promotions, to the tank of Colonel, Lieutenant Colonel Commandant or Lieutenant Colonel, and by Regimental Gradation in all inferior ranks.

2d European Infantry.

Each Regiment.

Bengal -- 1 Regiment.

2 Colonels.

Madras -1 Regiment.

2 Lieutenant Colonels.

Bombay-1 Regiment.

2 Majors. 10 Captains.

20 Lieutenants.

10 Ensigns.

3d Native Infartry.

Each Regiment.

(of 2 Battalions)

Bengal —34 Regiments.

Madras -25 Regiments.

2 Lieutenant Colonels.

Eombay-12 Regiments.

2 Majors.

10 Captains.

2 Colonels.

20 Lieutenants.

• 10 Ensigns.

· 4th Native Cavalry.	Each Regiment (8 Troops.)
Bengal -8 Regiments.	1 Colonel.
Madras -8 Regiments.	1 Lieutenant Colonel.
Bombay - 3 Regiments.	1 Major.
The Extra Majors to be	5 Captains.
borne as Supernumerary	10. Lieutenants.
till absorbed by Vacancies	5 Cornets.
in their respective Corps.	

5th Artillery.	Bengal.	Madras	Bombay	Each Battalion for Brigade.
Brigades of Solor Battalious of	3	2	1	1 Colonel. 1 Lieutenant Colonel.
Foot Artillery, Do. of Golun-	5	3	2	1 Major.5 Captains.10 First Lieutenants.
daz as at present	1	1	1	5 Second Ditto.

The Rocket Troops and Native Horse Artillery to form component parts of the Horse Brigades authorised.

The Officers of Artillery will continue to rise in one Corps as heretofore at each Presidency.

6th Engineers	In one Corps each Presidency.	Benga	Madras	Bomba	
N. B. The Major and	Colonels	2	2	2	
Captain in the Bengal	Lieutenan t Col.	2	2	2	
Engineers extra to this	Majors	2	1	1	j
Establishment, will be re-	Captains	10	10	10	
turned Supernumerary, till	1st Lieutenants.	20	16	16	,
brought on the Effective	2d Lieutenants.	10	7	7	
List by Casualties.					
•	Total	46	38	38	

7th Medical Department.

Bengal—100 Surgeons.

200 Asst. Surgeons.

Madras—70 Surgeons.

140 Asst. Surgeons.

Bombay—40 Surgeons.

80 Asst. Surgeons.

moduling all Ranks, whether Members of the Medical Board, Superintending Surgeons of Divisions, Civil Station Surgeons or Assistants, as well as those who have given up promotion for permanent Stations.

8th. An Additional General Officer on the Honourable Company's Establishment, is authorised for the Staff of each Presidency, and the Generals of Artillery and Engineers are rendered eligible to the Staff, the Command of those Corps devolving to the Senior Colonels or Field Officer.

9th. The Honourable Court having entirely separated the Senior List of each Presidency from the Effective Strength of the Army, no Casualties occurring in it after the 1st May 1824, are to give promotion as heretofore.

10th. The Regiments of Cavalry on the Bombay Establishment are to be placed on the same Scale of Organization in respect to Officers and Men, as those on the Bengal and Madras Establishments; and, from the date of carrying this Arragement into Effect, the Field Officers of Cavalry at Bombay, who now rise in Line with the Infantry, are to be promoted in a Line amongst themselves, as the other Presidencies, respectively.

11th. No Half Mounting Stoppages are to be made from any branch of the Native Armies from the Receipt of these Orders. Further Regulations will be issued on the pulliect.

· 12th. So soon as the Infantry Promotions are Effected, the Several Regiments of Eutopean and Native Infantry will be divided into two Regiments each, by the final Separation of Battalions; and the Officers posted alternately, i. e. all the odd or uneven numbers of each Rank to the first, and the even numbers to the second Battalions of their present Regiments; when the Several Regiments on this new formation will be numbered in the order in which they were first raised and formed, Casualties anterior to the 1st of May to be filled up at each Presidency, if known on the date of promulgating the posting of Officers to Regiments of Single Battalions.

13th. It is not intended that in carrying the present orders into Effect, Officers should be permanently removed from the particular Battalion in which they may long have served and wish to remain, provided that by an interchange between Officers standing the same number of removes from promotion each could be retained in his particular Battalion, and both are willing to make the exchange, and shall prefer an application for that purpose within four months from the date at which the present arrangement shall take Effect, or within twelve months where either of the parties shall be absent on furlough.

14. The Officers who by the above arrangement become Colonels or Lieutenant Colonels Commandant of Regiments or Battalions in each Branch of the Service, shall succeed according to Seniority to a Half Share of Off-reckonings; the two Seniors being admitted to this benefit on the occurrence of each vacancy among the present Colonels of Regiments:—But each Officer who stands first at the date assigned to this arrangement for succession to the benefits of the Off-reckoning

Fund in each branch of the Service, and all who may succeed to Off-reckoning Shares within two years from the same date (1st May,) shall receive direct from the Treasury an allowance equal to the difference between the amount of the Share actually enjoyed by him under the new plan and that which he would have been entitled to under the existing System and from such date only as he would have been entitled had that System continued.

loth. His Excellency the Commander in Chief will, be pleased to give effect to this arrangement as early as possible, as far as respects the Bengal Army; and the Governments of Fort Saint George and Bombay are requested to issue the necessary orders to the Armies of those Presidencies respectively.

MISCELLANEOUS INTELLIGENCE.

Change of Musket Balls in Shrapnell's shells, and the action of gunpowder upon Lead.

In the 35th No. of the Annals of Philosophy (new series), we observe under the head of Scientific Intelligence, notices of the above circumstances which we extract, as interesting of our readers, and we shall offer some remarks upon the first.

Change of musket balls in Shrapnell's shells.

"Mr. Foraday states, that Mr. Marsh of Woolwich, gave me some musket balls, which had been taken out of Shrapnell's shells. The shells had laid in the bottoms of ships, and probably had sea water among them. When bullets are put in, the aperture is merely closed by a common cork. These bullets were variously acted upon; some were affected only superficially, others more deeply, and some were entirely changed. The substance produced is hard and brittle, it splits on the ball, and presents an appearance like some hard varieties of earthly hæmatite; its colour is brown, becoming, when heated, red; it fuses, on platinum foir, into a yellow flaky substance, like litharge. Powdered and boiled in water, no muriatic acid or lead was found in solution. It dissolved in nitric acid without leaving any reciduum. and the solution gave very faint indications only of muriatic acid. 'It is a protoxide of lead, perhaps formed in some way, by the galvanic action of the iron shell and leaden ball, assisted, probably, by the sea 'water. It would be very interesting to know the state of the shells, in which a change like this has taken place to any extent; it might have been expected, that as long as any iron remained, the lead would have been preserved in a metallic state." (Institution Journal for October 1823.)

Remark. The notice of this circumstance, induces us to surmise, that, probably, a part of the effect produced on these leaden balls, may be ascribed to the action of the residue of inflamed gunpowder, these shells having been previously used in practice, with merely blowing powder, without bursting them. The corrosive effect of the residue of inflamed gunpowder upon metals is well known, and hence it becomes especially necessary, when shells are used in practice with blowing powder only, that the residue of the powder should be carefully washed out, in magazines or laboratories, as soon after the shell has been used as possible; and this cleansing of the shell internally, can only be perfected by making use of hot water and bran or ashes:

It has been customary to carry Shrapnell's shells, loaded with their proper charge of bursting powder, when proceeding on service; and several instances have come to our knowledge, in which, when Shrapnell's have been fired, though the fuze burnt well, the bursting charge has failed in its intended effect of bursting the shell. This cannot have proceeded from the mealing of the powder by the action of the balls; because we have tried the experiment of bursting both 6 and 12-pounder Shrapnell's with a charge of meal powder only, an ounce in quantity less than the usual proportion of the bursting charge, and the shells were invariably burst. But we can easily account for the failure if the shell

had been loaded without freeing it from the impurities of former practice, as the action of such impurity upon the powder of the bursting charge, would effectually weaken the force of it; especially if the weather when the shells were loaded was moist, as in the cold and rainy seasons. The cleaning of shells from the residue of inflamed powder by washing them after practice, ought to be strictly attended to. Ed.

Action of Gunpowder on Lead.

Mr. Faraday says, that "Mr. Marsh gave me also some balls from cartridges, about fifteen years old, and which had probably been in a damp magazine. They were covered with white warty excrescences, rising much above the surface of the bullet, and which, when removed, were found to have stood in small pits, formed beneath them. These excrescences consist of carbonats of lead, and readily dissolve with effervescence in weak nitric acid, leaving the bullet in the corroded state which their formation has produced. It is evident there must have been a mutual action among the elements, of the gunpowder itself, at the same time that it acted on the lead; and it would have been interesting, had the opportunity occurred, to have examined what change the powder had suffered". (IBID.)

New mode of manufacturing Saltpetre.

Mr. Baffi, a skilful chemist, born at Pergola, has received from the Vice-roy of Egypt, a present of 100,000 crowns, and the title of Bey, for having discovered a mode of manufacturing Saltpetre, without the aid of fire, but by the heat of the sun's rays only. Before this discovery, each 100 lbs. of Saltpetre cost the vice-roy

ten crowns, but by the new process, the expense of 100 lbs. is reduced to one crown.

The manufactory established by Mr. Baffi at Memphis, has furnished, during the last year, to the Egyptian army 3,580,000 pounds of saltpetre. The Egyptian pound is equal to the English. Extracted and translated from Le Musee des Varietes Litteraires, No. 1, 1822.

We are of opinion that a similar process might be advantageously introduced into our manufactories here, the heat and evaporation during the dry months being fully adequate to effect all that is required in the extraction of the salts from the Saltpetre earths. Experiment must, however, be made to ascertain if the perfect refinement of this article by the sun's rays alone can be accomplished in India; but of the result we feel sanguine. Ed.

The Cutting of steel by soft iron.

Mr. Barnes of Cornwall, Connecticut, has ascertained a singular property of soft iron in cutting hard steel. He had fixed a circular plate of soft sheet iron upon an axis, and putting it into a lathe, gave it a very rapid rotatory motion, applying, at the same time, a file to it to make it perfectly round and smooth. The file, however, was cut in two by the plate, the latter remained untouched; and it was found not to have been much warmed in the operation, though a band of intense fire surrounded it whilst in action.

A saw made of a very hard plate, which required altering, was cut through longitudinally in a few minutes; and afterwards teeth were cut in it by the same means. Had the file been used to produce the same effect, it would have required a long and tedious operation.

Rock crystal applied to the plate cut it readily.

Mr. Perkins of Fleet Street, has verified this remarkable and useful observation. A piece of a large hard file was cut by him into deep notches at the end, where also, from the heat produced by friction, it had been softened and thrown out like a burr, On another part of the file, where the plate had been applied against its flat face, the teeth were removed, without any sensible elevation of the temperature of the metal. The plate, which had previously been made true, was not reduced either in size or weight during the experiment, but it had, according to Mr. Perkins, acquired an enceeding hard surface at the cutting part. Silliman's Jour. VI. 336.

The account of this experiment is not only interesting, but the hint may perhaps prove useful in some of our Indian Magazines. Ed.

Inflammation of gunpowder by slaking lime.

In consequence of the application of quick lime to the desiccation of various substances, the Comité consultatif de la direction des Poudres et Salpêtres, made some trials of the temperature produced by slaking lime. They found that it frequently rose so high as to inflame gunpowder thrown upon it; and that even when enclosed in a glass tube, and the tube put in amongst the lime, the heat was sufficient to fire the gunpowder. Hence quick time would be a dangerous desiccator in a powder house. Annales de Chine, XXIII. 217.

Native carbonate of Soda in India.

Captain John Stewart being, in the course of military operations, encamped on the banks of the Chumbul,

near the village at Peeplouda, just where the Chaumlee and Chumbul join, had occasion to observe the production of this alkali, in considerable quantities, in the bed of the river. "It being the dry season there was scarcely any stream, but a number of pools, and walking amongst them, I observed the ground for a considerable space appeared beautifully white; on examining it closely, I found it covered with a fine pure saline efflorescence, in general about two or three tenths of an inch in depth, covering a soft, wet, and slippery mud; the taste and appearance of this salt induced me to conclude that it was carbonate of soda, which I found to be the case on taking some of it to my tent." Before Captain Stewart could ascertain the extent of the bed, an order came for removal, but he believes there are numberless places in the bed of the river, besides the one he discovered, and thinks they might be easily and profitably worked in the dry season. Bombay Trans. 111, 53,

Can any of our readers give us any further information on this head? Ed.

NOTICE.

THE EDITOR OF THE MILITARY REPOSITORY, through the kind patronage of the Governor General of India, has been appointed to a situation at a considerable distance from the Presidency.

It will therefore, he fears, be out of his power to continue a publication which has been so kindly supported: but if matters can be so arranged he will endeavour to continue the same, so as to publish a seventh number on the 1st of July 1825.

In the mean time, he earnestly solicits the communication of military matter, which, if the publication is continued, will be gratefully acknowledged.

All communications intended for the Repository to be addressed to Captain Parly, Allahabad.

The Editor of the Repository trusts that those Subscribers who have not received or paid for the former Nos. of the work, will adjust their accounts with Mr. Smith of the Hurkaru Library, Calcutta.

And he begs that all subscribers who wish to discontinue their names, will inform Mr. Smith of the same.

Dum Dum, June 1824.

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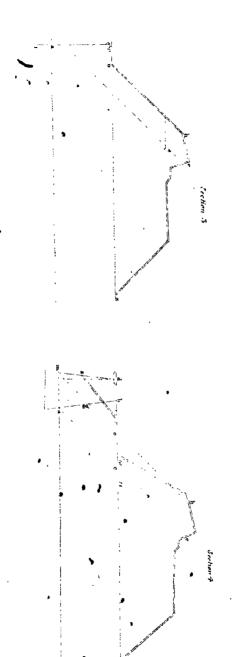
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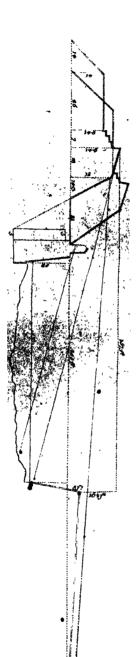
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